Town of Whitchurch-Stouffville

Asset Management Plan

2025

June 20, 2025

Prepared in consultation with SLBC Inc.

Stouffville

EXECUTIVE SUMMARY

The Town of Stouffville is committed to delivering a wide range of high-quality services to its residents, businesses, and visitors. These services include transportation, stormwater, water, and wastewater management, as well as parks and recreation, cultural programs, library services, and fire protection. Supporting these services are essential internal functions, including facilities management, fleet operations, and information technology.

To deliver these services effectively, the Town relies on a diverse portfolio of infrastructure assets with a total replacement value of approximately $1,748.5 million. This includes 496.9 lane-kilometres of roadways, 17 bridges and culverts, 102 kilometres of sidewalks and walkways, and approximately 357 kilometres of underground water, wastewater, and stormwater pipes.

This Asset Management Plan (AM Plan) outlines the strategic actions required over the 10-year period from 2024 to 2033 to manage these assets in a way that maintains established service levels, supports growth, mitigates risk, and ensures long-term financial sustainability. It evaluates current and proposed levels of service, forecasts lifecycle costs, and identifies funding gaps and associated risks, offering mitigation strategies to guide informed, evidence-based decision-making.

Developed in accordance with Ontario Regulation (O.Reg.) 588/17 – Asset Management Planning for Municipal Infrastructure, this AM Plan fulfills the Town's regulatory obligations for 2025. It is a foundational tool to help optimize asset performance and ensure the Town's infrastructure continues to meet the evolving needs of the community efficiently and effectively.

The AM Plan Is publicly available on the Town's website and supporting documentation is available upon request.

Asset Inventory

The estimated replacement value of the Town's assets is $1,748.5 million (2024$), as shown in Table ES-1-1. The table includes a breakdown of the inventory by service.

Table ES-1-1 Assets covered by this AM Plan

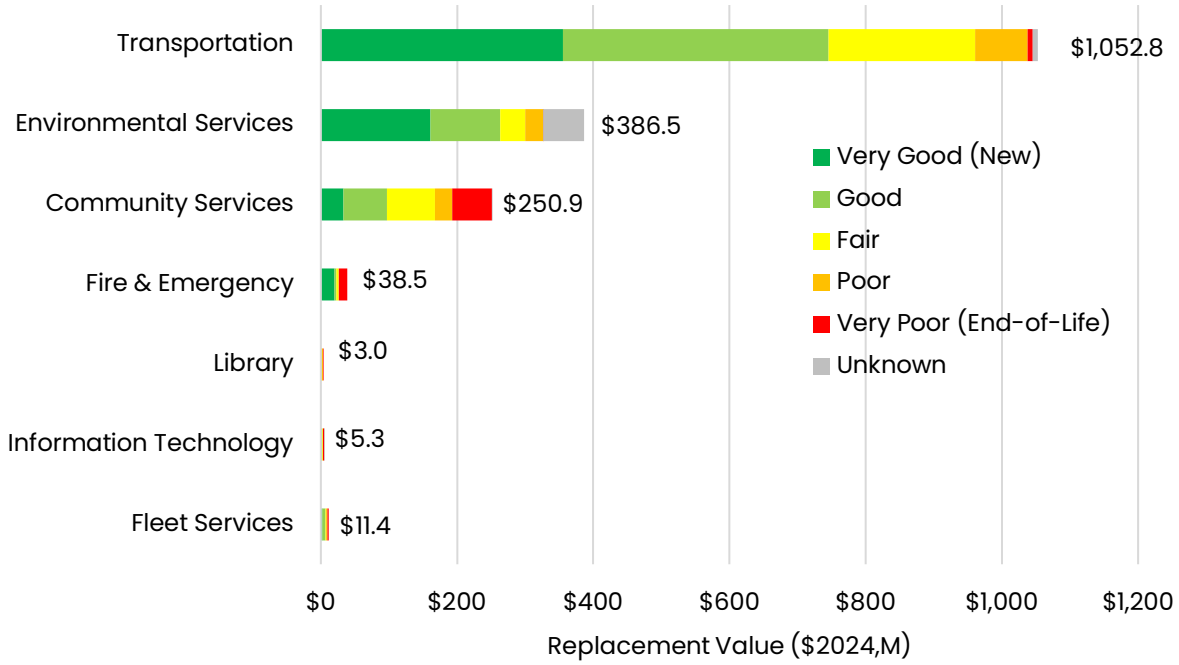
Service	Asset Categories	Replacement Value ($2024, millions)	Replacement Value (%)
Transportation Services	Roads, Bridges, Culverts, Sidewalks and Walkways, Traffic Signs, Traffic Signals, Streetlights, Equipment, Stormwater Pipes, Stormwater Ponds, Oil-Grit Separators, Discharge Points, Stormwater Tank	$1,052.8	60.2%

Service	Asset Categories	Replacement Value ($2024, millions)	Replacement Value (%)
Environmental Services	Water Mains, Pipes, Valves, Hydrants, Meters, Bulk Water Station, Equipment, Wastewater Mains, Pipes	$386.5	22.1%
Community Services	Community Facilities, Municipal Office, Transportation Facilities, Parks Land Improvements, Playgrounds & Pergolas, Equipment	$250.9	14.3%
Fire & Emergency Services	Fleet, Equipment, Fire Stations	$38.5	2.2%
Library Services	Books/Media, Hardware, Software, Institutional Equipment	$3.0	0.2%
Information Technology	End User Devices, Server Equipment, Networking Equipment, Software	$5.3	0.3%
Fleet	Transportation, Environmental, Community, and Corporate Fleet	$11.4	0.7%
TOTAL		**$1,748.5**	**100.0%**

State of Infrastructure

The following graph depicts, by colour, the value of assets that fall within each of the condition grades (very good or new, good, fair, poor, very poor or end-of-life), organized by service area. The total replacement value of assets within each service area is shown to the right of the condition grade bar.

Figure ES-1 Asset Condition Grade Profile, By Service Area



To adequately meet service levels and manage risk while minimizing lifecycle costs, most assets should generally be preserved in fair or better condition. The above figures show that the majority of the Town's assets – in fact 83.8% – are in fair or better condition based on weighted value.

Subsequently, 12.3% of assets, valued at $214.3 million, are classified as being in poor or very poor condition. Additionally, 3.9% of assets, representing $68.1 million, have an unknown condition status, highlighting the need for further assessment and data collection. These unknown condition assets can be found in the Table ES-1-2.

Table ES-1-2 Unknown Assets covered by this AM Plan

Asset Category	Asset	Replacement Value (2024$)
Transportation	Roads	$819,024
	Signs	$1,946
Stormwater	Mains	$6,664,616
	Oil Grit Separators	$242,180
Water	Mains	$4,971,069
	Meters	$1,812
	Valves	$7,503,836
	Hydrants	$2,443,120
	Equipment	$38,378
Wastewater	Mains	$45,271,686

Asset Category	Asset	Replacement Value (2024$)
Facilities	Ballantrae Community Centre	$7,383
Information Technology	End User Devices	$18,420
	Servers & Storage	$130,000
Total		**$68,113,468**

It is good asset management practice to have a small portion of assets that the Town runs to failure (indicting that the asset is non-critical, there are sufficient spares, or the asset is easily replaced). This allows for efficient lifecycle cost management for the Town, especially for assets that do not have a significant impact on service delivery if they were to fail. However, assets in poor or very poor condition require increased attention from staff to ensure their failure does not significantly impact service delivery. Any service delivery-critical assets in very poor condition are typically prioritized within the Town's 10-year capital renewal program and budget forecasts.

Levels of Service

Levels of Service (LOS) and current performance on these various measures are tracked for each service area. Measures include those defined by O.Reg. 588/17 for roads, structures, stormwater, water, and wastewater infrastructure, as well as measures defined by the Town to reflect specific priorities and concerns related to service delivery across each of the services areas.

In general, the LOS measures can be grouped into three categories:

- **Capacity & Use LOS** demonstrate if services have enough capacity and are accessible to the customers. For example, Fire Services tracks the number of overlapping calls to ensure their fleet and facilities meet the needs and requirements for the Town.
- **Functional LOS** demonstrate if services meet the community's needs and meet their intended or required purpose. Typical functional LOS for the Town include meeting legislative requirements and energy efficiency initiatives for facilities and fleet.
- **Quality and Reliability LOS** demonstrate if services are reliable and responsive to customers. These LOS measures focus on ensuring that assets are kept in a state of good repair and that maintenance work is being performed on time.

Risk Management Strategy

As illustrated in Figure ES-2, approximately $54.0 million (3.2%) of the Town's infrastructure assets with known condition data fall into the Very High-risk exposure category. These assets present potential challenges to the consistent and reliable delivery of municipal services. Of note is that most assets that are categorized as Very High-risk have the likelihood of failure based on age and might not reflect the actual condition of the asset. The unknown condition assets are excluded from the risk exposure map in Figure ES-2.

Figure ES-2: Risk Exposure of the Town's Assets

Risk exposure in year 2024 $, millions

Likelihood of Failure					
Certain	$0.6	$4.3	$22.6	$43.2	$10.4
Likely	$0.2	$44.1	$42.2	$46.4	$0.3
Possible	$0.5	$122.9	$102.6	$100.8	$0.9
Unlikely	$0.4	$221.4	$223.7	$123.0	$27.8
Rare	$0.3	$230.4	$162.2	$134.6	$0.5
	Consequence of Failure				

Risk Exposure Ratings

Very High	$54.0	3.2%
High	$212.9	12.8%
Moderate	$649.7	39.0%
Low	$518.8	31.1%
Very Low	$231.2	13.9%
Total	**$1,666.5**	**100.0%**

The Very High-risk assets include:

- Signal Structures & Equipment, and Control System ($1.0M)
- Traffic Signs ($0.1M)
- Facility Components at the Ballantrae Community Centre, Leisure Centre, Operations Centre, Stouffville Arena, Stouffville Clippers Sports Complex, Municipal Office, Whitchurch-Stouffville Museum ($36.7M)[1]
- Park Amenities and Structures: ($3.1M)
- Community Services Equipment ($0.7M)
- 2008 Spartan Pumper ($1.5M)
- Fire Station #52 ($9.5M)
- Wireless Access Points ($0.2M)
- Firewall ($0.2M)
- Physical Servers ($1.0M)

To address and mitigate these risks, the Town employs a proactive risk management approach through targeted lifecycle strategies. These include scheduled maintenance, timely asset renewal, and strategic replacement initiatives. By prioritizing very high-risk assets and aligning interventions with condition data and service level requirements, the Town enhances infrastructure resilience, reduces long-term costs, and safeguards service continuity for the community.

Lifecycle Management Strategy

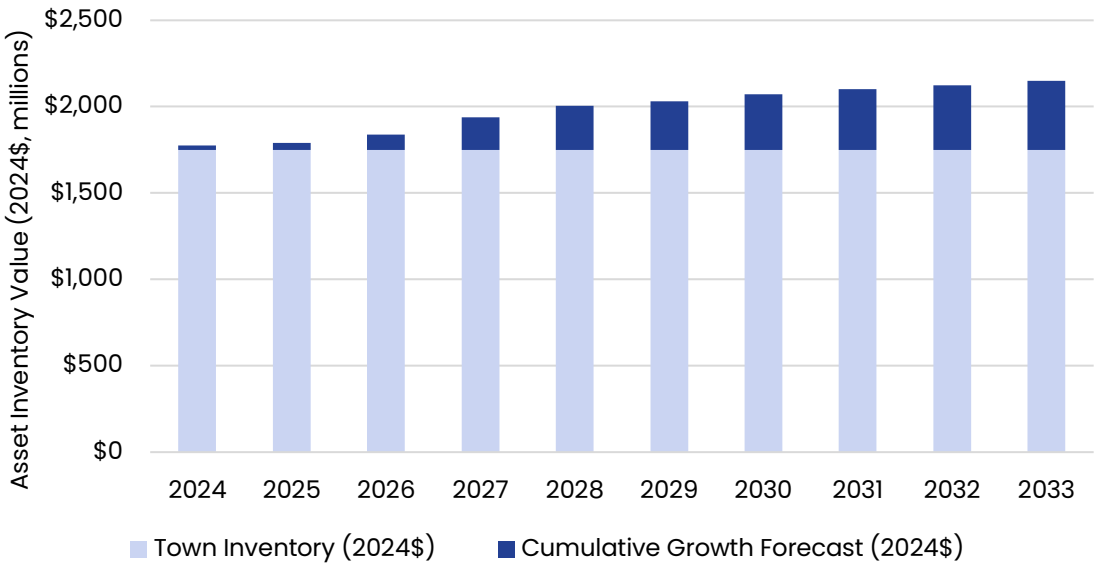
Growth Forecast

The Town has forecasted asset growth through the 2024-2033 Capital Plan are shown in Figure ES-3. The asset portfolio is planned to grow by over $401 million dollars by 2033. Of note

[1] The Town will be conducting regular building condition assessments to provide a more accurate assessment of facility component condition which will provide a more accurate assessment of the very high-risk assets.

is that ~$58 million is currently unfunded but is forecasted to be needed due to population growth.

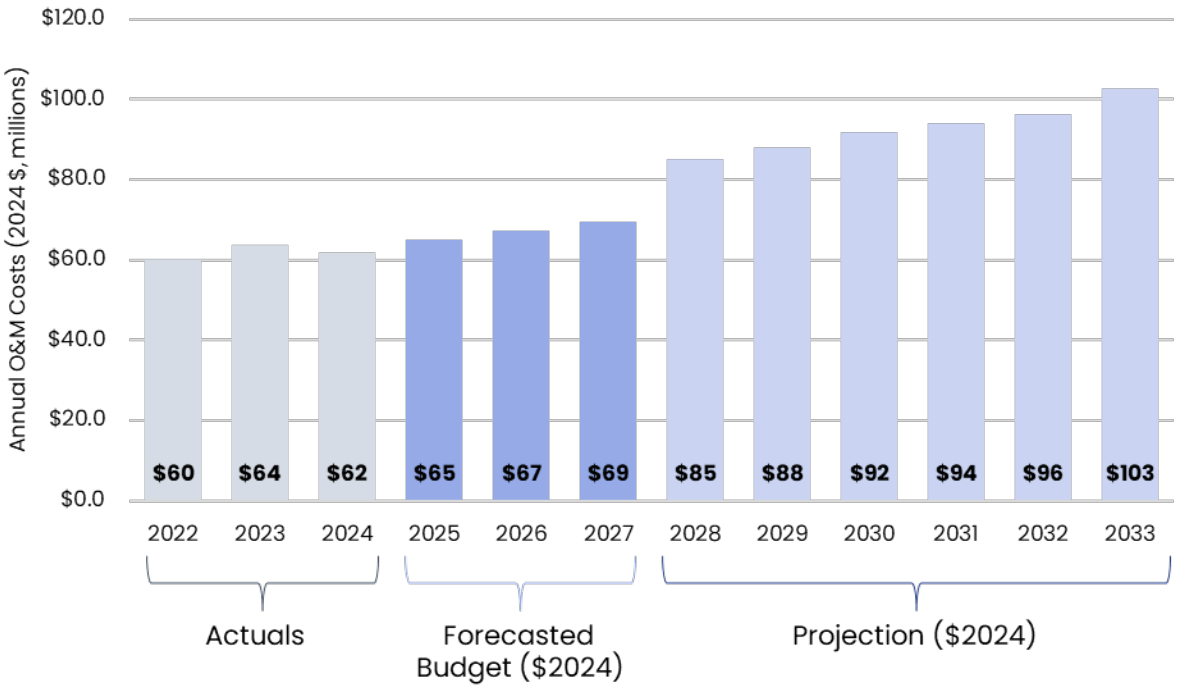
Figure ES-3: 10-Year Inventory Forecast



Operations & Maintenance Forecast

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset inventory. As additional assets are acquired, the future operations and maintenance costs are forecast to increase and as assets are disposed, the forecast operations and maintenance costs are expected to decrease. Figure ES-4 shows the forecast operations and maintenance costs for the next 10 years which plan to increase from $62 million/year in 2024 to $103 million/year in 2033.

Figure ES-4: Operations and Maintenance Needs Forecast

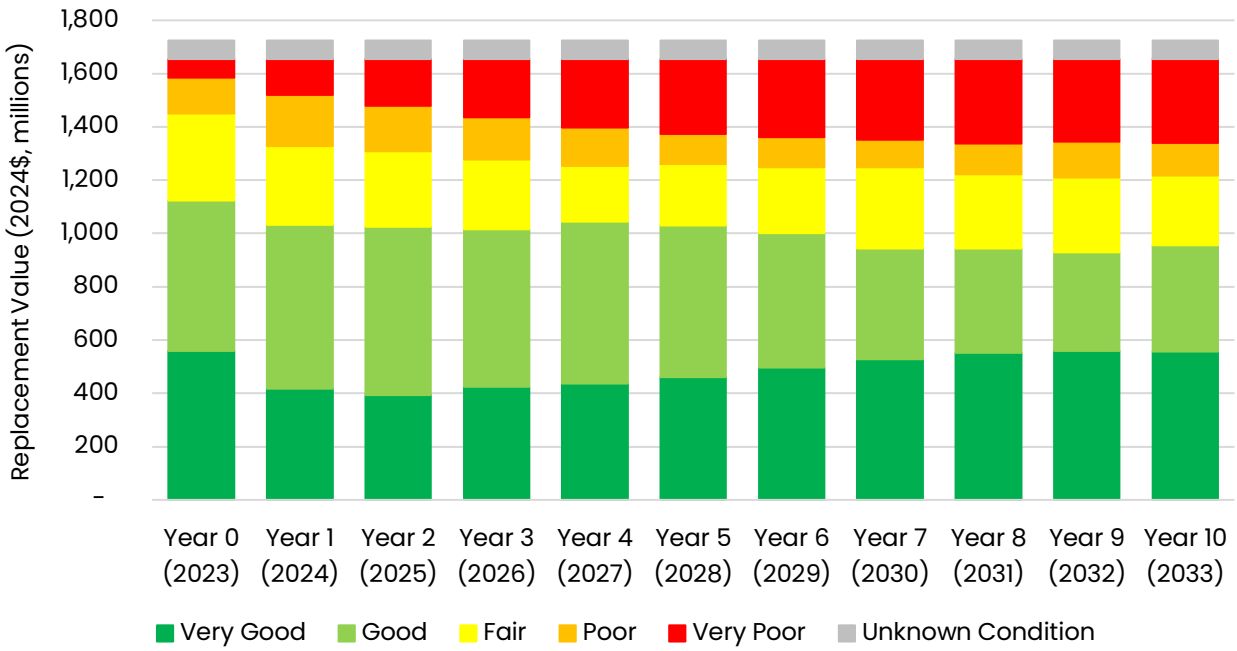


Renewal & Rehabilitation Forecast

The renewal forecasts consider the asset's current condition or age, the Town's planned rehabilitation and replacement activities, as well as the recommended strategies from specific studies such as BCAs (Building Condition Assessments). Asset renewal needs are triggered by condition, age, or other performance measure. If installation date is missing, renewal needs are included as an average annual reinvestment rate (same investment each year) based on asset value and useful life.

Based on the forecasted budget outlined in the 2024-2033 capital plan, the Town has approximately $12.3 million per year to invest in the renewal of all its assets. Based on the forecasted budget, the following figure illustrates how the condition is expected to change over the forecasted period (the percentage of Fair or better condition assets decreasing from 84% to 71% over the forecasted period and the percentage of Very Poor condition assets increasing from 4% to 18% over the forecasted period).

Figure ES-5: Planned Budget Condition Forecast for All Town Assets



Financing Strategy

Table ES-1-3 provides a summary of the total asset management needs, available funding, and resulting investment gap across the three core categories of investment: Growth, Renewal, and Operations and Maintenance (O&M). This breakdown is intended to clearly illustrate where funding shortfalls exist and to support evidence-based planning and prioritization decisions. Renewal needs reflect the investment required to maintain existing assets in a state of good repair; O&M needs represent the costs necessary to operate and maintain infrastructure at desired service levels; and growth needs account for the capital investment needed to support new development or increased demand.

Table ES-1-3: Summary of Needs, Funding, and Investment Gap from 2024-2033

Category	10-Year Avg. Annual Need ($Millions)	10-Year Avg. Annual Funding ($Millions)	10-Year Avg. Annual Investment Gap ($Millions)	Ratio of Anticipated Funding to Needs
1. Growth	$40.1	$34.3	$5.8	86%
2. Renewal	$16.4	$12.3	$4.1	75%
3. O&M	$83.1	$78.4	$4.7	93%
Total	**$139.6**	**$125.0**	**$14.6**	**90%**

The $14.6 million per year investment gap highlights the financial challenges faced in sustaining current and future service levels and reinforces the importance of long-term

financial planning and funding strategy development. If the investment gap is not funded sufficiently, the Town can expect the following impacts.

- Increased unplanned maintenance and repairs.
- Increase of renewal backlog over future planning horizons, increasing the long-term cost to the Town.
- Safety, compliance, reputation, and financial (insurance) risks.
- Crowding among residents using existing services.
- Increased traffic congestion due to unplanned repairs and poor road conditions.

The funding gap and associated impacts may be reduced by one or more of the following strategies:

- Reduce near term renewal needs by deferring capital renewal projects on lower risk assets, thereby lengthening the period in which the backlog is addressed beyond the 10 years. This may result in increased maintenance costs and risks to service delivery. If this occurs, it is recommended to increase the frequency of inspections on these assets to ensure safety is maintained.
- Maintain the 3% capital dedicated levy (as previously approved in prior budgets).
- Increase available funds through property tax increases and leveraging third party grants.
- Reduce renewal needs by divesting of assets. This may reduce service levels related to capacity.
- Invest and incorporate a robust predictive maintenance program that uses inspections to prevent failures before they occur.
- Optimize lifecycle interventions, especially for larger asset classes (roads, water, wastewater, facilities).
- Be strategic and mindful of growth investments, so as to not put an unfair burden for renewal on future generations.
- Increase the use of non-infrastructure solutions to manage the funding gap through management strategies and policies to allocate funds to the most critical assets.

Debt funding and reserve funding may also be used; however, these are not sustainable solutions, since the debt funding needs to eventually be paid back, and reserves need to be replenished.

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1 INTRODUCTION

1.1 Background

The Town of Stouffville (the Town) is committed to delivering high-quality services to its residents, businesses, and visitors. These services include transportation, stormwater, water, and wastewater management, as well as parks and recreation, cultural programs, library services, and fire protection. The services are supported by essential internal assets, including facilities, fleet, and information technology systems.

This Asset Management Plan (AM Plan) outlines the strategic approach required to effectively manage and sustain the Town's infrastructure over the next 10 years while meeting established Levels of Service (LOS) targets. It provides a comprehensive analysis of asset lifecycle activities, projected financial requirements, and associated risks under current funding levels, along with recommended mitigation strategies to ensure service continuity and infrastructure resilience.

Through proactive asset management, the Town aims to optimize infrastructure investments, enhance operational efficiency, and support long-term sustainability.

1.2 Alignment with Regulatory Requirements

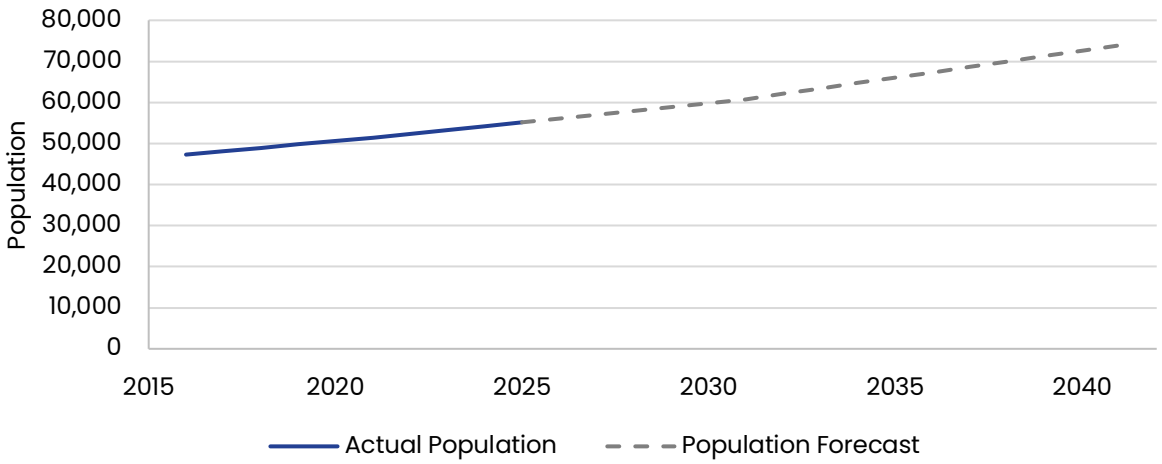
This AM Plan fulfils the requirements of the Ontario Regulation (O.Reg.) 588/17 Asset Management Planning for Municipal Infrastructure for 2025. Specifically, this AM Plan establishes proposed Levels of Service (LOS) and recommends actions and financial strategies to meet the proposed service levels within a manageable level of risk over the next 10 years.

In accordance with the requirements of O.Reg. 588/17, this AM Plan is posted on the Towns's website. Going forward, O.Reg. 588/17 requires that progress implementing the AM Plan be reported to Council by July 1 each year, and that the AM Plan be updated every 5 years or more frequently. Background information and reports for the State of Infrastructure section may be provided by the Town upon request.

1.3 Alignment with Growth Forecast

The Town monitors trends in its population to ensure that its impacts on service levels are well understood, and strategies are developed to address additional demands due to growth and changes in demographics. In accordance with the 2024 Official Plan, the Town's population is expected to be 73,900 persons in 2041, with employment at 24,000 jobs, as shown in Figure 1-1.

Figure 1-1: Town Population History and Forecast to 2041



1.4 Relationship with Other Municipal Documents

AM planning is a medium- to long-term (<10 year) activity that relies on input from strategic planning activities and informs shorter-term decision making. The AM Plan provides a framework to validate the Town's budgeting processes and assist in prioritizing work activities, including capital projects, based on risk. It also discusses levels of service that support goals in the Town's 2022-2026 Strategic Plan and lifecycle management strategies intended to reduce the overall cost of asset ownership.

The AM Plan is intended to be read with other Town planning documents, including the following:

- 2022-2026 Strategic Plan Report
- Development Charges Background Study (2023)
- Transportation Master Plan (2024)
- Water and Wastewater Master Plan (2024)
- Bridge Inspection Report (2024)
- Operating and Capital Budgets
- Tangible Capital Asset (Fixed Asset) Annual Financial Statements
- Water System Annual Reports
- Multi-Year Accessibility Report (2022)
- Energy Conservation and Demand Management Plan (2024)
- Multi-year Accessibility Plan (2020-2025)
- Fire Master Plan (2022)
- Leisure and Community Services Master Plan (2022)
- IT Digitial Plan (2024)
- Policies
    - Corporate Asset Management Policy AP82
    - Corporate Debt Management Policy AP84
    - Reserve Fund Policy AP86

- Operating and Capital Budget Policy AP89
- Multi-year Budget Policy AP90

1.5 Key Stakeholders

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 1-1 below.

Table 1-1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Town of Whitchurch-Stouffville Elected Council	Overall owners of the Town's assets. Approves asset management policies and asset funding allocation through the annual corporate budget process. An overarching expectation of a standard of care is required by Council to ensure commitment to effective asset management practices.
Senior Leadership Team (SLT)	Provides corporate oversight to the program to ensure that the goal and directions of the Corporate Asset Management program are maintained, and the program remains consistent with the overall Strategic Plan.
Finance	Finance provides historic Tangible Capital Asset (TCA) amounts, and historic and current capital and operating budgets. Further, provides coordination on input data and development of the AM Plan from each of the service and program areas.
Service Area Departments	Provide input data, forecasts, and content for the AM Plan relative their service and program area or area of functional expertise.
Library Board	Provides input data, forecasts and text for the AM Plan relative its service and program area.

1.6 Scope of the AM Plan

This AM Plan focuses on nine (9) Town services which all assist in providing municipal services to the Town's residential, commercial, industrial, and institutional customers. Where data gaps were encountered, recommendations for closing data gaps are provided to enable the Town to continually improve its AM Planning capabilities.

A. Transportation Service
The Town's transportation network comprises roads, bridges, culverts, sidewalks, traffic signals, traffic signs and streetlights.

B. Stormwater Management
The Town's stormwater network includes storm sewers, catch basins, maintenance holes and an underground stormwater reservoir in the community of Stouffville urban area. A streetsweeper is used to remove sand, silt and other debris from roads before it can accumulate in the stormwater ponds. Dry ponds and wet ponds exist throughout the Town to capture stormwater.

C. Water Service

The Town operates two drinking water systems: the Stouffville Drinking Water System, and the Ballantrae Drinking Water System. These systems receive treated water from York Region and distribute it to residents and businesses in the communities of Stouffville and Ballantrae-Musselman's Lake, respectively. The Town also operates the Gormley Fire Protection Water System, which provides water for fire protection to the Gormley business community.

D. Wastewater Service

For wastewater services, the Town operates and maintains a network of wastewater mains and maintenance holes in the community of Stouffville. Wastewater is collected from residents and businesses in that community and transmitted to wastewater treatment facilities operated by York and Durham Region.

E. Community Services

This service area includes parks, playgrounds, sports fields, trails, the Whitchurch-Stouffville Museum and theatre, as well as program equipment within recreational buildings such as community centres and arenas. These assets provide opportunities for leisure, sports, and community gatherings.

F. Fire & Emergency Services

This includes fire and emergency response vehicles and equipment necessary for ensuring public safety and responding to emergencies.

G. Library Services

The assets which support the Town's Library portfolio such as collections, furnishing and equipment, information technology and other equipment within library space.

H. Information Technology

IT infrastructure supports the Town's digital operations, including networks, servers, software systems, and communication technologies.

I. Fleet Services

Fleet Services provide vehicles and equipment support across multiple Town departments, including Community Services, Public Works, By-Law, and Planning and Development. These vehicles support operations and maintenance activities and include heavy vehicles and equipment for road maintenance, winter control vehicles and equipment for roads and sidewalks, and light vehicles (primarily pickup trucks) for crew transport to inspection and job sites.

1.7 Organization of Document

The AM Plan is organized to meet the requirements of O. Reg. 588/17 (Proposed Levels of Service) and the Province's "Guide for Municipal Asset Management Plans". The contents of this AM Plan follow the recommended elements of a detailed AM Plan:

- **Executive Summary:** Summary of the AM Plan.
- **1 – Introduction:** Outlines scope, background information, relationship to other Town documents and plans, and applicable legislation.
- **2 – State of the Infrastructure:** Summarizes the inventory, valuation, condition, and remaining life of the assets in the inventory by service and asset type.
- **3 – Levels of Service:** Defines levels of service through performance indicators and presents current and target performance. Describes external trends or issues that may affect expected levels of service.
- **4 – Risk Management Strategy:** Defines strategies in a structured approach to identifying, assessing, and mitigating risks that could impact the performance and reliability of municipal infrastructure.
- **5 – Lifecycle Management Strategy:** Summarizes the asset management strategies (i.e., planned actions) that will enable the assets to provide the target levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.
- **6 – Financing Strategy:** Summarizes the financial planning and budgeting associated with asset management planning.
- **7 – AM Plan Monitoring and Improvement:** Summarizes the next steps including monitoring of AM Plan implementation progress and improving future iterations of the AM Plan**.**
- **8-14 –Service Areas Summaries:** Provide AM Plan details for each of the service areas.

2 State of the Infrastructure

The Town is committed to maintaining and managing its infrastructure to ensure the continued delivery of essential services to residents and businesses. A comprehensive understanding of the current state of municipal assets is critical for effective long-term planning, investment, and service sustainability. The State of Infrastructure section of this AM Plan provides a detailed overview of the Town's asset inventory, offering a snapshot of asset valuation, age, and condition at a specific point in time (the end of 2023). This assessment includes key infrastructure categories such as roads, structures, stormwater, water, wastewater, facilities, fleet, parks, and technology assets. By evaluating asset condition, risk exposure, and lifecycle needs, the Town can make informed decisions to optimize investments, extend asset longevity, and ensure reliable service delivery.

To support continuous improvement, recommendations for sustaining data collection and reporting are outlined in the AM Plan Improvement and Monitoring section. Through ongoing assessments and data-driven planning, the Town aims to proactively address infrastructure needs, manage risks, and support community growth while maintaining financial sustainability.

2.1 Asset Hierarchy and Inventory

Understanding the assets owned by the Town that are used to support each major service area is important to enable their effective and efficient management. In this AM Plan, the Town's asset inventory has been organized around the major service areas shown in Table 2-1 in the following sub-section. The asset inventory included in this AM Plan includes all assets owned by the Town ending December 31, 2023.

Most infrastructure assets owned by the Town are included and organized into linear networks, facilities, fleet, equipment, information technology, and land improvements. Leasehold improvements in facilities not owned by the Town are not included. Land is generally not included in the current replacement costs of the asset inventory. As inputs into decision-making, data and information are important assets but are not currently included in this Plan.

2.2 Asset Valuation

Financial accounting valuation uses historical costs and depreciation assumptions to determine the book value of capital assets in accordance with the Public Sector Accounting Board (PSAB). Policies and procedures relating to the development of net book values for accounting purposes have been developed by the Town to comply with PSAB 3150 Tangible Capital Assets (TCA) reporting. Costs for facilities were determined leveraging the Town's 2023 Development Charge (DC) Background Study, where an extensive exercise was completed to cost each unit square metre cost for each facility type. For the facility costing, the 2023 building value ($/square foot) was utilized with an additional 5% added to account for site work costs.

While financial accounting valuations are based on historical costs, managerial accounting valuations are based on replacement costs. For some asset types, the replacement values were calculated using historical costs indexed to December 31, 2024, using the Non-Residential Building Construction Price Indices (NRBCPI) or Consumer Price Index (CPI), as appropriate for the asset type. For the most part, replacement values are benchmark values calculated from current and previous construction year contracts. The replacement cost valuation represents the estimated cost to replace assets today and is presented in 2024 dollars and does not account for future technology improvements but does account for increased regulatory requirements and technology improvements to date.

The estimated 2024 current replacement value of Town non-core assets is $1,748.5 million, as outlined in the following table. For a detailed summary of the assets covered in this AM Plan refer to Sections 8 to 14.

Table 2-1: Assets covered by this AM Plan

Service	Asset Categories	Replacement Value ($2024, millions)	Replacement Value (%)
Transportation Services	Roads, Bridges, Culverts, Sidewalks and Walkways, Traffic Signs, Traffic Signals, Streetlights, Equipment, Stormwater Pipes, Ponds, Oil-Grit Separators, Discharge Points, Stormwater Tank	$1,052.8	60.2%
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Information Technology	End User Devices, Server Equipment, Networking Equipment, Software	$5.3	0.3%
Fleet	Transportation, Environmental, Community, and Corporate Fleet	$11.4	0.7%
TOTAL		**$1,748.5**	**100.0%**

2.3 Asset Condition

In this AM Plan, the term "condition" refers to the degree of physical deterioration of an asset. "Performance" is a more general term that typically describes an asset's ability to achieve levels of service through measures such as capacity, function, and operational quality.

Condition assessment programs evaluate current physical condition, determine rate of deterioration over time, enable forecasts of future condition, and inform the most beneficial type and timing of treatment. Bridges, culverts, roads, and some facilities use consistent condition assessment methods and rating systems as per

Table 2-2.

Some facilities at the Town have undergone condition assessments to identify deficiencies and recommend repair and replacement of building elements. The Town completed Building Condition Assessments (BCAs) for some of their critical facilities in 2018 to obtain a better understanding of their state of good repair needs. It is recommended that building condition assessments be performed for these types of facilities at least every five years and the Town has a plan to update their BCAs over the next 2-3 years.

Buildings with completed assessments that are captured within this AM Plan include: Town Hall, Operations Centre, 55+ Club, 19 on the Park, Stouffville Clippers Sports Complex, and Fire Hall #51 and #52.

For those assets with no condition data, age-based condition is estimated as the percentage of age to useful life. Using age data as a surrogate for condition data is common in municipal organizations, but it can be misleading as age does not always directly reflect condition or remaining life.

To ensure consistency in assessing and managing asset conditions across various infrastructure categories, the Town employs a standardized five-point condition grading system, as summarized in

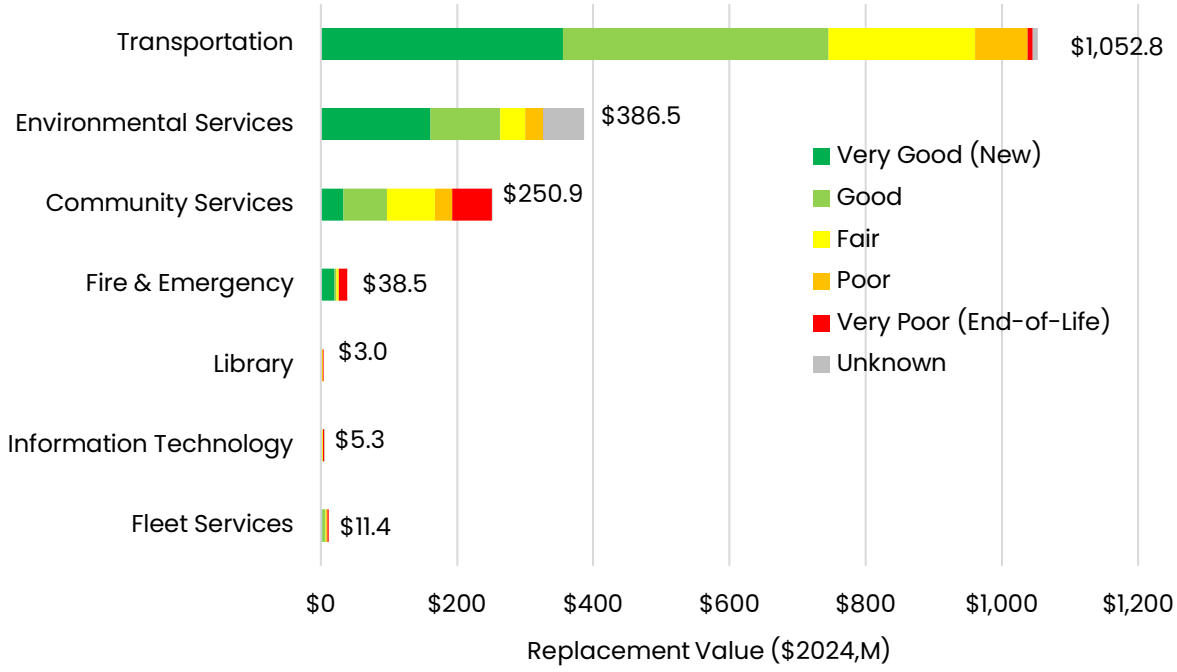
Table 2-2. This system aligns with the general condition grading framework outlined in the International Infrastructure Management Manual (IIMM) and facilitates the comparison of asset conditions and trends over time. By translating detailed engineering data into a uniform scale ranging from Very Good (VG) to Very Poor (VP), the Town can effectively monitor and manage its infrastructure. Asset condition details are currently maintained in various databases and spreadsheets, with industry-standard condition rating systems and age-based assessments converted into the standardized grading system to support comprehensive asset management.

Table 2-2: Five-Point Condition Grading System

Score	Grade	Description	Pavement Condition Index (PCI)	Bridge Condition Index (BCI)	Culvert Condition Index (CCI)	Facility Condition Index (FCI)	% Life Consumed (Other Assets)
1	Very Good	Fit for the future	85-100	85-100	80-100	0 to 2%	0% - 25%
2	Good	Adequate for now	70-85	60-85	50-80	2 to 5%	25% - 50%
3	Fair	Requires attentions	50-70	40-60	25-50	5 to 10%	50% - 75%
4	Poor	Increasing potential of affecting service	30-50	20-40	10-25	10 to 30%	75% - 100%
5	Very Poor	Unfit for sustained service	< 30	< 20	< 10	Over 30%	100%+
	Unknown	Unknown					

The following graph depicts, by colour, the value of assets that fall within each of the condition grades (very good or new, good, fair, poor, very poor or end-of-life), organized by program area. The total replacement value of assets within each service area is shown on the horizontal axis. Specific condition summaries for each service area are outlined In Sections 8 to 14.

Figure 2-1: Asset Condition Grade Profile, By Service Area



To adequately meet service levels and manage risk while minimizing lifecycle costs, most assets should generally be preserved in fair or better condition. The above figures show that the majority of the Town's assets (83.8%) are in fair or better condition based on weighted value.

There are 3.9% of the Town's assets, representing $68.1 million, that have an unknown condition status, emphasizing the need for further assessment (see Table 2-3). As part of the asset renewal program, condition assessment frequencies and protocols should be formalized for critical and high-value assets, and the recurring cost conducting condition assessments should be added to the capital needs schedule. For example, building condition assessments should be conducted at least every 5 years.

Table 2-3: Unknown Assets covered by this AM Plan

Asset Category	Asset	Replacement Value (2024$)
Transportation	Roads	$819,024
	Signs	$1,946
Stormwater	Mains	$6,664,616
	Oil Grit Separators	$242,180
Water	Mains	$4,971,069
	Meters	$1,812
	Valves	$7,503,836
	Hydrants	$2,443,120
	Equipment	$38,378
Wastewater	Mains	$45,271,686
Facilities	Ballantrae Community Centre	$7,383
Information Technology	End User Devices	$18,420
	Servers & Storage	$130,000
Total		**$68,113,468**

Approximately 12.3% of the Town's assets, valued at $214.3 million, are classified as being in poor or very poor condition. It is good asset management practice to have a small portion of assets that the Town runs to failure (indicting that the asset is non-critical, there are sufficient spares, or the asset is easily replaced). This allows for efficient lifecycle cost management for the Town, especially for assets that do not have a significant impact on service delivery if they were to fail. But assets in poor or very poor condition require increased attention from staff to ensure their failure does not significantly impact service delivery. Any service delivery-critical assets in very poor condition are typically prioritized within the Town's 10-year capital renewal program and budget forecasts.

3 Levels of Service

3.1 Overview

A key principle of effective asset management is defining the levels of service that the community expects, balancing affordability with cost-effective service delivery. Performance management plays a critical role in this process by systematically setting objectives, measuring progress, and using data-driven insights to enhance service delivery. Good performance management helps the Town to**:**

- Optimize Resource Allocation
- Enhance Service Reliability
- Ensure Financial Stability

By monitoring performance against established service levels, the Town can align resources with priorities, identify areas for improvement, and ensure assets support community needs efficiently. Performance indicators help track service quality, reliability, and sustainability. As part of long-term planning, the Town also evaluates proposed levels of service to address future demands, ensuring infrastructure and services continue to meet evolving community expectations.

3.2 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of Town services are outlined in Table 3-1. Please note that the list of legislative requirements is not exhaustive.

Table 3-1: Legislative Requirements

Legislation	Requirement
Municipal Act, 2001	The main statute governing the creation, administration and government of municipalities in Ontario, other than the City of Toronto.
Ontario Regulation 588/17 The Infrastructure for Jobs and Prosperity Act, 2015	Sets out the principles for the provincial government to regulate asset management planning for municipalities.
Accessibility for Ontarians with Disabilities Act (AODA)	Develops, implements, and enforces accessibility standards to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures, and premises on or before January 1, 2025.
Public Sector Accounting Board Standard 3150	Standards on how to account for and report on tangible capital assets in government financial statements.
Technical Standards and Safety Act, 2000	Sets out the technical standards and safety regulations to enhance public safety by providing for the efficient and flexible administration of various industries or equipment.
Fire Protection and Prevention Act, 1997	Sets out the legislative and regulatory framework for the establishment of fire protection in Ontario, which is a mandated municipal responsibility.

Legislation	Requirement
Ontario Building Code Act, 1992	The legislative framework governing the construction, renovation and change-of-use of a building in Ontario. The Ontario Building Code, a regulation under the Act, establishes detailed technical and administrative requirements and minimum standards for building construction in public health and safety, fire protection, structual sufficienty, construction materials, plumbing and mechanical systems.
Highway Traffic Act	Regulates the operation of vehicles, including municipal fleets, road safety, and signage. Impacts transportation, roads, and fleet management.
Environmental Protection Act	Governs environmental management related to air, land, and water, impacting stormwater, wastewater, parks, forestry, and landfill management.
Safe Drinking Water Act	Ensures safe drinking water through compliance with water quality standards, asset maintenance, and risk management planning for the Water Utility.
Ontario Water Resources Act	Governs the protection and conservation of water resources, impacting water, sanitary, and stormwater utilities.
Ontario Regulation 239/02, Minimum Maintenance Standards (MMS)	Establishes minimum standards for road and highway maintenance for all municipalities. MMS regulations pertain to various elements of road repair and maintenance, such as the frequency of road inspections, weather monitoring, ice formation on roadways, snow accumulation, and sidewalk trip ledges.

Legislated Community Levels of Service

The Town is legally required to provide services to the community in accordance with legislated standards, including compliance monitoring and reporting. Many of these requirements focus on ensuring asset safety, reliability, and service quality. Regulatory inspection data is maintained in various databases and managed by Town staff at the operational level to uphold compliance. While detailed records remain at the operational level, high-level reporting confirms the Town's adherence to all applicable regulations.

3.3 Strategic and Corporate Goals

The 2022-2026 Strategic Plan outlines the vision, mission, corporate operating principles, and strategic themes. The main pillars of strategic priorities and the accompanying focus areas are listed within the Strategic Plan are provided in the table below.

Table 3-2: Corporate Strategic Themes (2022-2026 Strategic Plan)

No	Theme	Areas of Focus	
1	**A Town that Grows**	1. Building permits 2. Development services	3. Business and marriage licensing 4. Business attraction and retention
2	**A Town that Moves**	1. Traffic management 2. Road maintenance	3. Sidewalk maintenance 4. Street lighting
3	**A Healthy & Greener Town**	1. Recreation programming 2. Parks, trails and open spaces 3. Tree canopy maintenance	4. Cemeteries 5. Garbage collection 6. Recycling and composting
4	**An Engaging Town**	1. Events and community engagement 2. Theatre programming	3. Museum services 4. Latcham Art Centre 5. Library
5	**A Safe Town**	1. Public education - Fire 2. Fire prevention 3. Emergency response 4. Emergency management 5. Municipal law enforcement	6. Parking enforcement 7. Animal services 8. Crossing guards 9. Utility infrastructure locating
6	**Organizational Effectiveness**	1. Communications 2. Customer service 3. Facility management 4. Financial and infrastructure management	5. Fleet Management 6. Human Resources 7. Information Technology Services
7	**Good Governance**	1. Council representation 2. Council support 3. Corporate leadership 4. Internal audit	5. Legal support 6. Risk management 7. Election management

3.4 Customer and Technical Levels of Service

LOS are statements that describe the outputs and objectives the Town intends to deliver to its citizens, businesses, and other stakeholders. Developing, monitoring and reporting on LOS are all integral parts of an overall performance management program which is aimed at improving service delivery and demonstrating accountability to the Town's stakeholders.

In general, LOS are guided by a combination of customer expectations, legislative requirements, and internal guidelines, policies, and procedures. In many cases, LOS are also implied based on past service delivery, community expectations, and infrastructure system design. Effective asset management requires that LOS be formalized and supported through a framework of performance measures, targets, and timeframes to achieve targets, and that the costs to deliver the documented LOS be understood.

Community LOS are grouped into the following categories:

- **Capacity:** Measures that reflect whether the service and supporting assets are of sufficient capacity to meet user demand.
    - Does the Town need more or less of these services and assets?

- **Function:** Measures that reflect the suitability of the services, operations, and assets for the user or other stakeholder.
    - Do they meet the needs of the community?
    - Do they meet regulatory requirements including those for health and safety, environmental protection, and accessibility?
    - Do they support the Town's strategic priorities?

- **Reliability & Quality:** Measures that reflect whether services and supporting assets are reliable, available when needed, and responsive to residents.
    - Are assets maintained and renewed to ensure a state of good repair (i.e., condition)?

- **Affordable:** Measures that reflect whether services and supporting assets are adequately funded in both the short and long term.

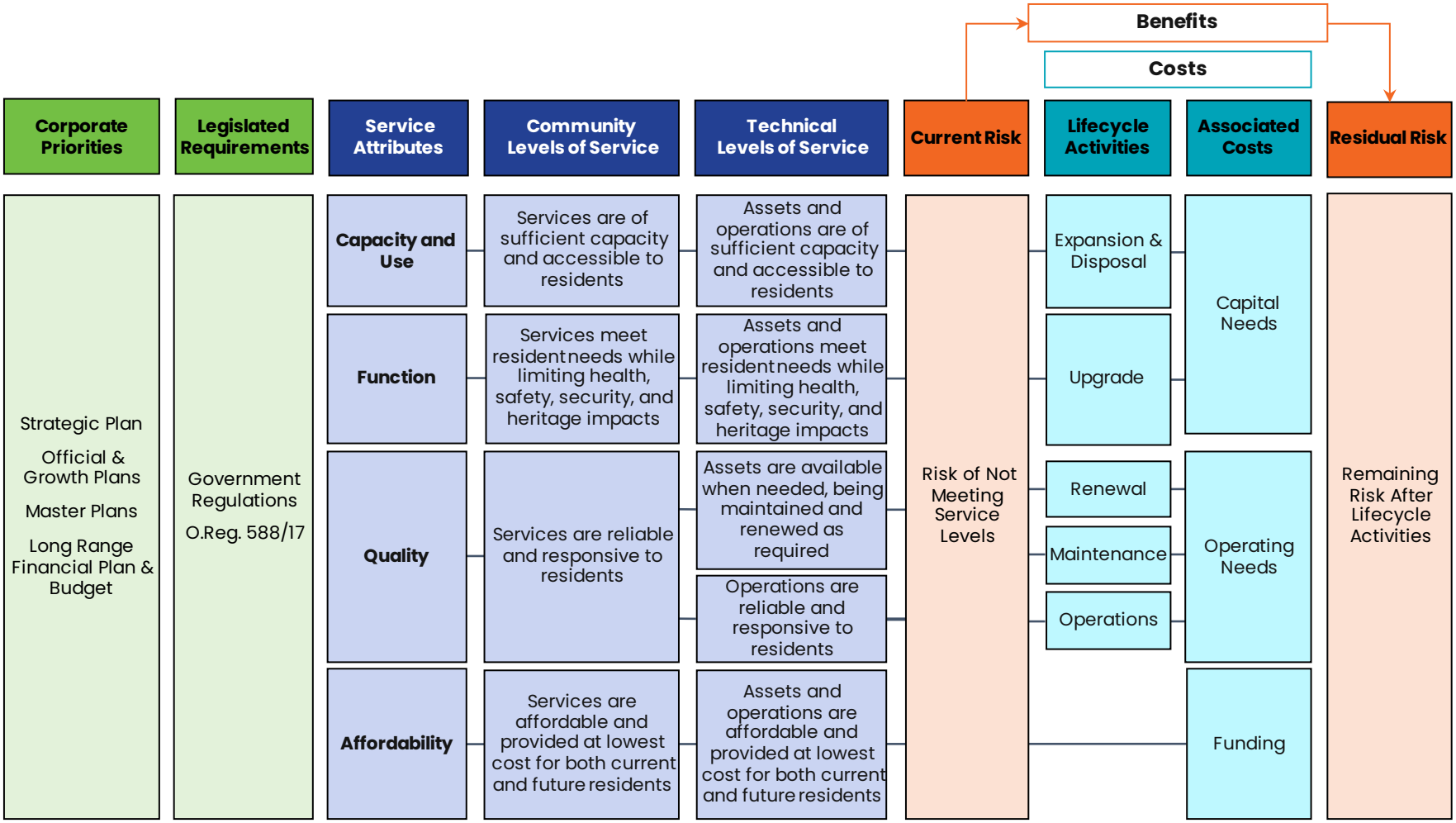
Technical LOS measures support the Community LOS. They relate to the allocation of resources to service activities to best achieve the desired community outcomes and demonstrate effective performance.

Community LOS are translated into Technical LOS, where:

- **Capacity LOS** drive assessment of expansion needs.
- **Function LOS** drive assessment of upgrade needs.
- **Reliability & Quality LOS** drive assessment of renewal, maintenance, and operations (and programming) needs.
- **Affordability LOS** drive assessment of financial sustainability needs.

The risks of failing to achieve the defined Community and Technical LOS are assessed, and lifecycle activities are prioritized to address those risks. Lifecycle activities may include expansion, upgrade, renewal, maintenance, or operational activities, depending on the category of LOS to be addressed. In some cases, lifecycle activities address several Community and Technical LOS. For example, a large renovation project at a facility may simultaneously increase capacity, make upgrades to meet regulatory requirements, and renew existing equipment. The nature of the lifecycle activity determines whether it should be funded as capital or operating, as well as eligible funding sources. As shown in the figure below, even after the lifecycle intervention, some residual risk may remain.

Figure 3-1: Levels of Service Framework



3.5 Customer Research and Expectations

Resident, business and other stakeholder input is sought during the update of the Town's Strategic Plan, Official Plan, Master Plans and annual budgets. This includes public opinion and stakeholder group surveys that collected information about user service patterns, behaviours and preferences today and potentially in the future. This customer research provides insight into citizens' and other stakeholders' needs and perceptions related to areas of improvement.

Town staff provided the perspectives they have heard from residents through other Town surveys to support setting the LOS targets. In the future, the Town would benefit from a LOS specific resident survey to gather perspective on satisfaction and willingness to pay for current Town services.

3.6 Current Performance

Detailed information on Community and Technical Levels of Service (LOS) and performance by service and program area is presented in Sections 8 through 14. Proposed LOS targets are outlined for each LOS, indicating the Town's goal for that LOS. This was included to set expectations around service provision for the next 10-years and to support the inclusion of needed lifecycle activities into the 10-year financial strategy. Where sufficient data is not available to determine the Town's current performance, the Town will be collecting data and monitoring performance in future years.

It is important for the Town to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. Additionally, changing circumstances such as technology and customer priorities will also impact future service levels.

3.7 Factors Impacting Levels of Service Performance

External trends and issues affecting current LOS performance or the Town's ability to meet the proposed LOS targets include the following.

- Population and employment changes (e.g. growth, demographics), which will impact infrastructure use.
- Changes in expectations for programs or patterns of use from the public, which will impact infrastructure use and revenue for services.
- Potential changes in technology and increased security requirements, which may replace obsolete equipment, provide longer asset life, and/or achieve higher quality and greater efficiencies.
- Potential changes to the cost of input variables (e.g. cost of power, fuel), which will impact costs to deliver the services.
- Infrastructure failing prematurely due to environmental factors and/or construction practices requiring renewal much earlier than the expected life of the asset.

- Availability of external funding (e.g. federal and provincial infrastructure programs), which may affect the infrastructure improvement activities that can be undertaken.
- Unexpected downloading of services by more senior levels of government.
- Popularity of sustainability initiatives and "greening" trends (e.g. LEEDs).
- Climate change, including changing storm events and patterns (e.g., higher frequency storms occurring more regularly), which will impact the infrastructure.
- Potential changes in Federal or Provincial legislation.

These factors will be monitored on an annual basis as the Town reports on Its LOS performance against the set targets to Council.

4 Risk Management Strategy

4.1 Overview

The Town's asset management strategy focuses on meeting service levels, managing risk, and minimizing lifecycle costs. Asset criticality (determined by an asset's impact on performance, lifecycle costs, and susceptibility to deterioration) guides the selection of appropriate management strategies. Critical assets are those that are essential to maintaining the Town's ability to provide core services. These assets typically have a high impact on service delivery, are costly to maintain or replace, and are highly vulnerable to failure due to age or condition. As such, they require ongoing monitoring, maintenance, and strategic investment to ensure reliability and continued performance.

Risk events, resulting from an asset's failure to meet capacity, function, or reliability standards, can disrupt service delivery. Lifecycle activities are implemented to reduce the likelihood of failure and ensure assets perform within acceptable risk levels. The Town uses a risk framework to quantify asset risk exposure, combining the consequence of failure (CoF) and the probability of failure (PoF) to prioritize projects and services. This approach allows for effective risk management and resource allocation across asset classes and services:

Risk Exposure = Consequence of Failure x Probability of Failure

4.2 Consequence of Failure

Asset criticality or consequence of failure reflects the importance of an asset to the Town's delivery of services. The following impacts of a potential asset failure are considered:

- Financial impact considerations such as asset replacement cost, damages to Town or private property and infrastructure, loss of revenue, and fines.
- Health and Safety considerations including the ability to meet health and safety related regulatory requirements, and degree and extent of injury, ranging from negligible injuries to loss of life.
- Service Delivery considerations ranging from a disruption of non-essential service to widespread and long-term disruption of essential service.
- Reputational considerations such as residents' reduced trust and confidence in Town government.
- Environmental considerations such as length and extent of damages to the natural environment.

The Town's Climate Risk and Resiliency Plan requires consideration of the consequences of extreme weather, emergency events and safety risks to the community. The risk assessment included climate change considerations but should be reviewed over time as the impacts of climate change become more apparent.

Table 4-1 summarizes the above listed impacts against an asset criticality rating scale from 1 to 5, with a higher score indicating a higher consequence of failure.

Table 4-1: Asset Criticality (Consequence of Failure) Ratings

Consequence Categories (Triple Bottom Line)		C1 Insignificant	C2 Minor	C3 Moderate	C4 Major	C5 Catastrophic
Economic	**Financial**	Damages, losses (including 3rd party) or fines from $1k to $10k	Damages, losses (including 3rd party) or fines $10k to $100k	Damages, losses (including 3rd party) or fines $100k to $500k	Damages, losses (including 3rd party) or fines $500k to $1M	Damages, losses (including 3rd party) or fines > $1M
Social	**Health & Safety**	No obvious potential for injury or affects to health.	Potential for minor injury or affects to health of an individual. Full recovery is expected; or minor medical attention may be required	Potential for serious injury or affects to health. May affect many individuals and / or result in short term disability; or Hospitalization may be required for a short period of time.	Potential for serious injury or affects to health of one or more individuals with a possibility of loss of a life and the certainty of long-term disability; or Emergency hospitalization required for one or more individuals.	Potential for death or multiple deaths with probable permanent damage; or Emergency and long-term hospitalization required for several individuals.
	Reputational	No Media Exposure	Minor or no media exposure	Moderate local media exposure lasting for several days	Intense local media exposure lasting several days and/or Municipality wide exposure	Significant Provincial exposure lasting several days or weeks
Operational	**Availability/ Reliability**	Small number of customers experiencing disruption / impact (less than 100 people or up to a few hours)	Localized service disruption / impact (100 to 1,000 people or up to 1 day)	Significant localized disruption / impact (1,000 to 2,000 people or less than 1 week)	Major service disruption / impact (2,000 to 5,000 people or for more than a week)	Municipality wide service disruption / impact (greater than 5,000 people or permanent loss of services)
Environmental	**Environment**	Very negligible impact or can be restored within 1 week	Minor (within 1 month) very isolated damage / impact to the environment, local importance	Significant short-term impact (up to 2 months), local importance	Significant long-term impact (up to 1 year), Provincial importance.	Major long-term impact (greater than 1 year), Federal importance.

4.3 Probability of Failure

The Town aims to ensure that its assets are kept in a state of good repair to reduce the incidence of unplanned service disruptions due to poor asset condition. Depending on the asset, unplanned failures can have wide-ranging consequences including service disruption, damage to surrounding infrastructure and property, risks to public safety, and environmental impacts.

For this AM Plan, Probability of Failure is estimated based on the condition of the asset, as shown in Table 4-2.

Table 4-2: Probability of Failure Ratings

Probability of Failure	Rating	Description		
		Description	Condition	Condition Grade
Rare	1	Asset is physically sound and is performing its function as originally intended. Asset is new or at the beginning of its service life.	1	Very Good
Unlikely	2	Asset is physically sound and is performing its function as originally intended. Typically, asset has been used for some time but is within mid-stage of its expected life.	2	Good
Possible	3	Asset is showing signs of deterioration and is performing at a lower level than originally intended.	3	Fair
Likely	4	Asset is showing significant signs of deterioration and is performing to a much lower level than originally intended.	4	Poor
Certain	5	Asset is physically unsound and/or not performing as originally intended. Asset has reached end of life and failure is imminent.	5	Very Poor

After assessing the criticality and probability of each asset's risk, the results were plotted on a risk map (a graphic representation of probability and consequence of failure). Colors on the map denote different levels of risk and help to inform and prioritize the Town's management of resources, time, and effort.

- Risks that appear in the red (Very High) zone are significant to the Town and therefore need to be actively managed and monitored in a more comprehensive manner than other risks (i.e., prioritized)
- Risks that appear in the yellow (High) or green (Moderate) zones will also be actively managed depending on their nature

- Risks that appear in the light blue (Low) or white (Very Low) zones are generally acceptable without significant mitigation strategies being implemented, although monitoring may still occur in some form.

4.4 Town Wide Asset Risk Profile

Based on those assets with known condition, Figure 4-1 shows that $54.0 million of the Town's assets or 3.2% are in the Very High-risk exposure category related to provision of reliable services. The unknown condition assets are excluded from the risk exposure map in Figure 4-1.

Figure 4-1: Risk Exposure of the Town's Assets

Risk exposure in year 2024 $, millions

Likelihood of Failure	Insignificant	Minor	Moderate	Major	Catastrophic
Certain	$0.6	$4.3	$22.6	$43.2	$10.4
Likely	$0.2	$44.1	$42.2	$46.4	$0.3
Possible	$0.5	$122.9	$102.6	$100.8	$0.9
Unlikely	$0.4	$221.4	$223.7	$123.0	$27.8
Rare	$0.3	$230.4	$162.2	$134.6	$0.5

Consequence of Failure

Risk Exposure Ratings

Very High	$54.0	3.2%
High	$212.9	12.8%
Moderate	$649.7	39.0%
Low	$518.8	31.1%
Very Low	$231.2	13.9%
Total	**$1,666.5**	**100.0%**

The Very High-risk assets include:

- Signal Structures & Equipment, and Control System ($ 1.0M)
- Traffic Signs ($ 0.1M)
- Facility Components at the Ballantrae Community Centre, Leisure Centre, Operations Centre, Stouffville Arena, Stouffville Clippers Sports Complex, Municipal Office, Whitchurch-Stouffville Museum ($36.7M)
- Park Amenities and Structures: ($3.1M)
- Community Services Equipment ($0.7M)
- 2008 Spartan Pumper ($1.5M)
- Fire Station #52 ($9.5M)
- Wireless Access Points ($0.2M)
- Firewall ($0.2M)
- Physical Servers ($1.0M)

To address and mitigate these risks, the Town employs a proactive risk management approach through targeted lifecycle strategies. These include scheduled maintenance, timely asset renewal, and strategic replacement initiatives. By prioritizing very high-risk assets and aligning interventions with condition data and service level requirements, the Town enhances infrastructure resilience, reduces long-term costs, and safeguards service continuity for the community. Specific Insights on the Very-High-risk assets for each service area can be found in the related Sub-Section.

5 Lifecycle Management Strategy

5.1 Overview

The Town's ability to deliver the LOS outlined in the AM Plan is primarily impacted by:

- Aging infrastructure and the associated need for operations, maintenance, and renewal investments to sustain it.
- Forecast future population growth and the associated need for additional infrastructure to serve it.
- Changing functional, legislative and sustainability requirements and the associated need for existing assets to be upgraded to continue to be fit for purpose.
- Available funds and the associated need for assets to be provided at lowest cost for both current and future customers.

To achieve its objectives, the Town builds new infrastructure assets to meet capacity needs, upgrades assets to meet new functional needs, and manages existing assets to meet reliability needs. These actions are all completed with limited funds. Asset lifecycle management strategies are planned activities that enable assets to provide the defined LOS in a sustainable way, while managing risk, at the lowest lifecycle cost. Asset lifecycle management strategies are typically organized into the categories listed in Table 5-1, and are driven by the LOS defined for each Service Area.

Table 5-1: Asset Lifecycle Management Categories

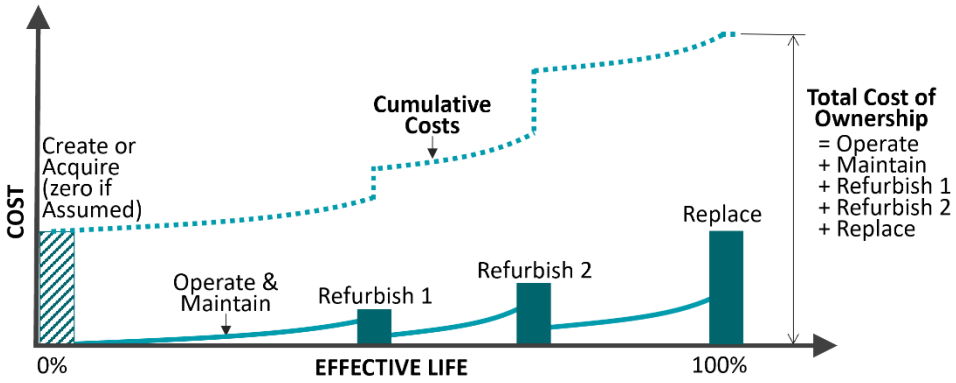
Lifecycle Management Category	Description	Examples of Associated Activities
Operate	Regular activities to provide services.	Inspect, clean, energy usage
Maintain	Activities to retain asset condition to enable it to provide service for its planned life.	Repair, replace component
Renew	Activities that return the original service capability of an asset.	Rehabilitate (minor), rehabilitate (major), replace
Upgrade	Activities to provide a higher LOS capability from an existing asset to achieve better fit for purpose or meet regulatory requirements.	Update system to be more energy efficient, improve environmental sustainability
Grow	Activities to provide a new asset that did not exist previously or an expansion to an existing asset.	Acquire new asset, expand existing asset

In addition to the above asset strategies, non-asset solutions (actions or policies that can lower costs, lower demands, or also extend asset life) are also considered. Examples of non-asset solutions include improved integrated infrastructure and land use planning, demand management, insurance, process optimization, and education of the public.

The Town assesses the costs of potential lifecycle activities to determine the lowest lifecycle cost strategy to manage each asset type while still meeting LOS. The total cost of ownership is the sum of lifecycle activity costs to sustain each asset type over the asset lifecycle. A

conceptual lifecycle cost model is shown in Figure 5-1. Sufficient investment of the right type and at the right time minimizes the total cost of ownership for each asset and mitigates other potential risks such as interruption to service delivery or damage to other nearby infrastructure. Operations, maintenance, and renewal activities are timed to reduce the risk of service failure from deterioration in asset condition and are part of the total cost of ownership.

Figure 5-1: Conceptual Lifecycle Cost Model



The Town uses its understanding of risks of not meeting service levels to inform the timing and level of investments needed in infrastructure assets. The Town aims to provide sufficient service capacity to meet demand and manages the upgrade, operations, maintenance, and renewal of assets to meet defined service levels, including legislated and other corporate requirements. This section of the AM Plan outlines the Town's expansion and upgrade strategies to support capacity and functional service levels, and the Town's operations, maintenance, and renewal activities to support reliability service levels.

5.2 Town Growth Needs

One main factor that municipalities must consider in asset management planning is the impact of future growth on meeting goals and objectives. The Town monitors trends in its population to ensure that its impacts on service levels are well understood and that strategies are developed to address additional demands due to growth and demographic changes. The Town's forecast population and household growth to 2051 is summarized in Table 5-2. Forecast growth is as reported in the Town's recently developed 2023 Development Charges Background Study.

Table 5-2: Town Population Forecasts (Source: 2023 DC Background Study)

Year	Population	Population Growth Rate	Total Households	Total Employment
2023	53,380	-	17,949	18,203
2033	68,022	2.5%	23,327	22.940
2041	71,685	0.7%	24,730	24,000
2051	103,500	3.4%	34,730	28,400

The Town anticipates that additional infrastructure will be required over the next 10 years to maintain capacity service levels. Some of this infrastructure will be acquired through Town-led construction (Town-Constructed), while other infrastructure will be constructed by developers then transferred to the Town through ownership assumption (Assumed Assets). The funding is addressed later within this report in the Financial Strategy Chapter.

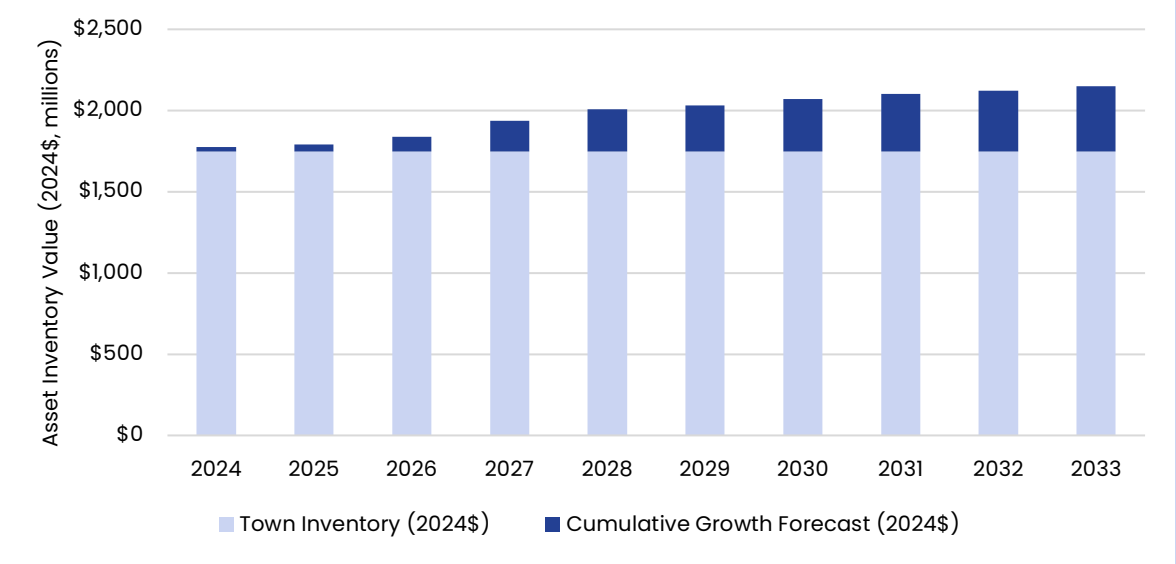
5.3 Town Inventory Growth Forecast

Annual growth and acquisition amounts for projects in the 2024-2033 Capital Plan are shown in Figure 5-2. The growth impact on the asset portfolio was increased by over $401 million dollars.

Significant planned growth assets included in Figure 5-2 include:

- Main St. Project in 2026-2028 ($22M+)
- Subtrunk 1 Extension Part 1 (600mm sewer on York/Durham Line from the existing subtrunk 1 sewer north of Hoover Park Drive to Main Street.) in 2027 ($13M+)
- Subtrunk 1 Extension Part 3 (450mm sewer on York/Durham Line from North limit of CamFella development to Forsyth Farm Dr.) in 2028 ($12M+)
- 600mm sewer in street A (future road) of MZO1 between Highway 48 and Willowgrove Creek Tributary B (east branch) in 2030 ($10M+)
- Additional Ballantrae Library Project in 2028 ($10M)
- Aquatic Centre Expansion Project in 2027 ($24M+)
- New Fire Stations 53 (2027), 54 (2033), 55 (2030), associated equipment, and fleet ($13M+ per station)
- New Neighbourhood Parks from 2025-2033 ($10M+)

Figure 5-2: 10-Year Inventory Forecast

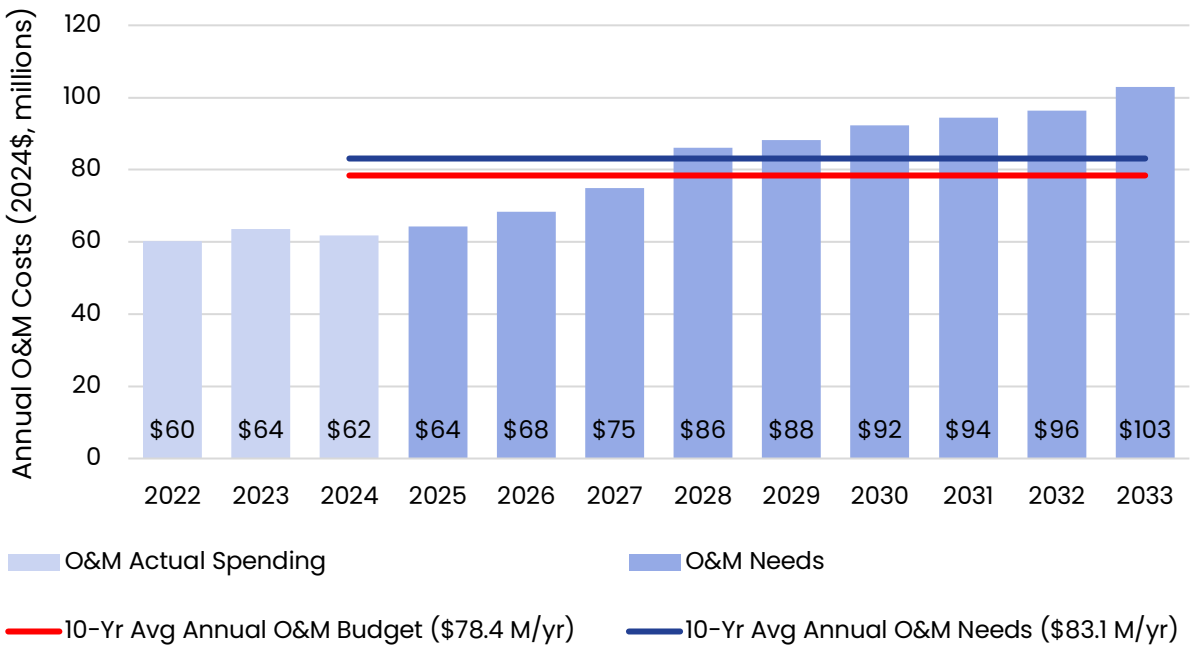


It is important to note that although identified as potential projects, several growth initiatives exist within the Town's Capital Plan are currently unfunded (~$58M).

5.4 Operations and Maintenance Needs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset inventory. As additional assets are acquired, the future operations and maintenance costs are forecast to increase. As assets are disposed of, the forecast operations and maintenance costs are expected to decrease. Figure 5-7 shows the forecasted operations and maintenance needs for the next 10 years.

Figure 5-3: Operations and Maintenance Needs Forecast



The figure shows that the costs are expected to increase from $62 million/year in 2024 to $103 million/year in 2033. Actual spending is reported in the dollar value from the indicated year while all other figure values are shown in year 2024$ and do not include inflation. Forecast increases in operations and maintenance needs are due to estimated growth in the asset portfolio as indicated in the Town's Capital Plan.

The Town has a forecasted budget which accounts for a look-out of operating expenditures until 2027. Operations and maintenance needs in future years past 2027 are assumed to increase proportionally with the increase in the replacement value of the asset portfolio by asset type (i.e. facilities, vehicles, equipment). The estimate of operations and maintenance cost increases can be refined by conducting more detailed analysis of operating costs and work order costs, for example by asset sub-types or by maintenance activity.

For the period 2024-2033, the annual operating and maintenance costs are expected to average $83.1 million/year.

5.5 Renewal Needs

Renewal is usually done through large capital projects that do not change the original purpose of the asset. This work typically restores, repairs, replaces, or renews an existing asset to its original condition. Any work beyond restoring the asset to its original condition is considered growth or upgrades, which can lead to higher future operation and maintenance costs.

Rehabilitation activities extend the life of an asset and reduce risk of failure. These activities and associated benefits are deemed more cost effective than allowing the asset to reach its end of life. The Town has identified estimated service lives for each of its assets. These replacement / rehabilitation intervals are developed to minimize lifecycle costs while considering service levels and associated risk.

The renewal forecasts consider the asset's current condition or age, the Town's planned rehabilitation and replacement activities, as well as the recommended strategies from specific studies such as the BCAs, Road Matrix assessment, and OSIM assessment. Asset renewal needs are triggered by condition, age, or other performance measures. If an installation date is missing, renewal needs are included as an average annual reinvestment rate (same investment each year) based on asset value and useful life.

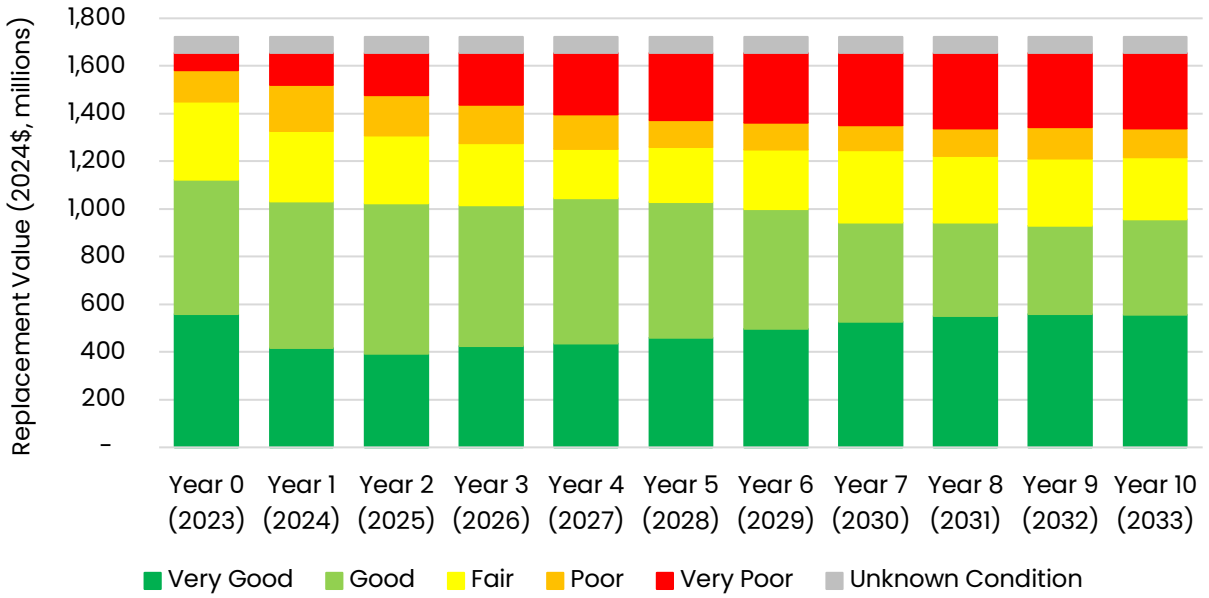
Generally, good asset management practice allows for a small portion of the asset portfolio to be replace when failed and not on a set schedule. This would typically occur for assets that are easily replaced and are readily available (i.e.., standard vehicles, non-specialized IT equipment, tools, etc.). These assets generally make up a small portion of the service area asset portfolios as each area has a small portion of their assets that they run to failure (indicating they would be in Very Poor condition).

The Town's renewal needs are evaluated according to two scenarios the planned budget / expected performance and the proposed LOS selected by the Town.

1. **Planned Budget / Expected Performance**

Based on the planned budget outlined in the 2024-2033 capital plan, the Town has approximately $12.3 million per year to invest in the renewal of all its assets. Using the planned budget, the following figure illustrates how the condition is expected to change over the forecasted period (the percentage of Fair or better condition assets decreasing from 84% to 71% over the forecasted period and the percentage of Very Poor condition assets increasing from 4% to 18% over the forecasted period).

Figure 5-4: Planned Budget Condition Forecast for All Town Assets



2. Proposed LOS Selected by the Town

The Town has proposed that the service levels to be maintained over the forecasted period. This has been modelled by maintaining the existing road condition (PCI of 67), bridge and culvert condition (BCI and CCI of 70), and the percentage of very poor condition assets (for all other age-based condition assessed assets). The average annual cost to maintain asset condition is estimated to be $16.4 million per year over the forecasted period. The renewal budget to maintain the condition of assets across the Town is expected to be short by $4.1 million per year which will result in the following impacts.

- Increased unplanned maintenance and repairs
- Increase of renewal backlog over future planning horizons, increasing the long-term cost to the Town
- Safety, compliance, reputation, and financial (insurance) risks
- Increased traffic congestion due to unplanned repairs and poor conditions

The methods to Town plans to use to manage this funding gap are described in the Section 6: Financing Strategy.

The condition forecast presented in this section is based on best available information at this time. Town staff are aware of the limitations of existing asset condition data are working to collect more accurate information which will be used in the future to provide more accurate assessments for the financial needs to maintain service levels.

Additionally, the $16.4 million per year renewal investment to maintain condition does not consider the additional expenses that will be required as the asset portfolio grows and

expands. The renewal of the growth assets will need to be incorporated into the long-term investment plan as well.

The specific renewal needs by service area are outlined in Sections 8-14. Each section includes a service area-specific summary of the available budget, expected performance based on the budget, and the average annual renewal investment needed to meet the Town's proposed LOS (i.e., maintain existing condition over the forecasted period).

6 Financing Strategy

6.1 Overview

The financial strategy is informed by the preceding sections of the AM Plan including the condition of the assets, the proposed levels of service, the risks to service delivery, and the lifecycle activities needed to reduce the risks to service delivery to acceptable levels. The financial strategy considers how the Town will fund the planned asset management actions to meet the proposed service levels.

Financial sustainability within the municipal government context can be defined as "*a government's ability to manage its finances so it can meet its spending commitments, both now and in the future. It ensures future generations of taxpayers do not face an unmanageable bill for government services provided to the current generation*".

A municipality is in a financially sustainable position if it:

- Provides a level of service commensurate with willingness and ability to pay.
- Can adjust service levels in response to changes in economic conditions or transfer payments from other levels of government.
- Can adjust its implementation plans in response to changes in the rate of growth.
- Has sufficient reserves and/or debt capacity to replace infrastructure when it needs to be replaced to keep its infrastructure in a state of good repair.

The key challenges to financial sustainability are:

- A discrepancy between level of service decisions and fiscal capacity.
- The future cost of infrastructure investments.
- Unforeseen impacts to revenue.

Per O.Reg. 588/17, this section of the AM Plan identifies the annual funding projected to be available to undertake the planned lifecycle activities and discusses strategies to address potential funding shortfalls.

6.2 Available Funding Amounts and Sources

Through the Town's annual budget process, capital project, and operating activity expenditure information is gathered from services areas / asset managers, including investment needs, trends, and priorities to enable preparation of the capital and annual operating plans. The Town currently approves one-year capital and operating plans and budgets.

The Town's main sources of revenue for state of good repair work include property tax, debt, Canada Community Building Fund (CCBF), third party grants, development charges, and user fees and charges. These funding sources are further outlined in the following table. There are restrictions on the use of funds from various sources (e.g. development charges, user fees).

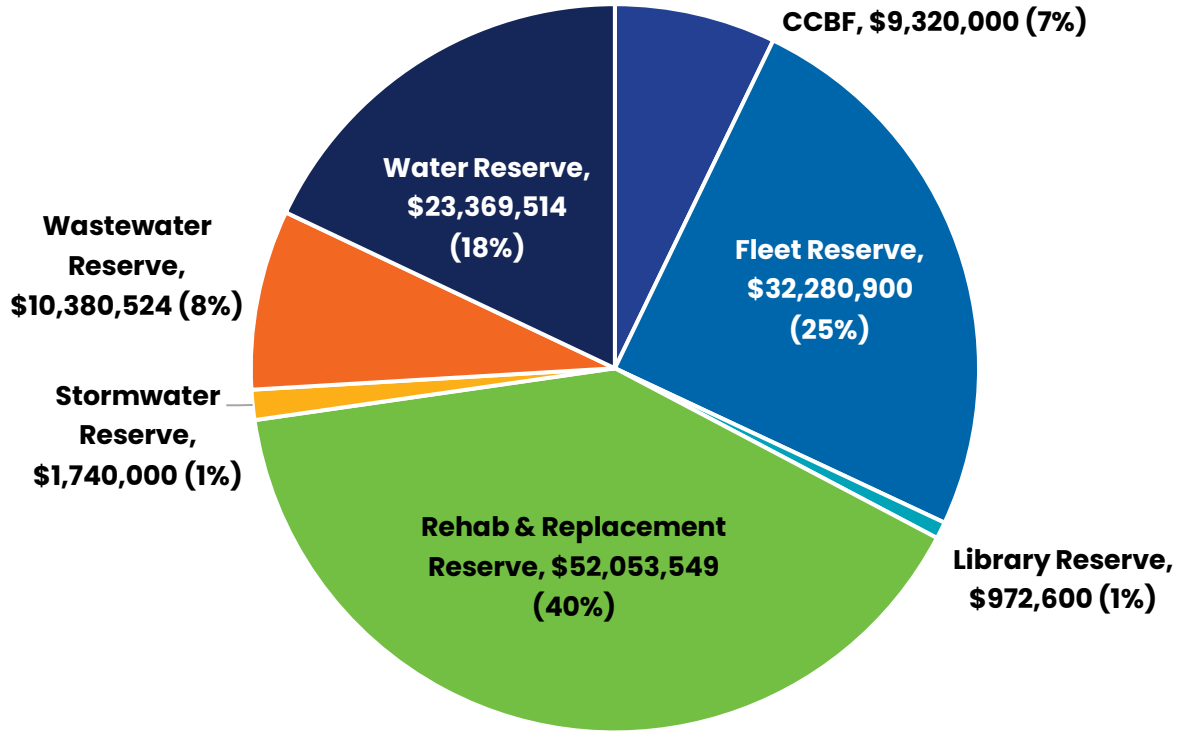
Table 6-1 below identified the different funding sources available at the Town to support "asset management" activities for core and non-core infrastructure.

Table 6-1: Asset Management Funding Sources

Name of Funding	Purpose or Restricted Use	Time Limit or Duration
Capital Levy (2.0% + 1.0%) 2% for AM needs and 1% for Main Street Reconstruction	Used for state of good repair, split across three reserves: 1. Fleet & Equipment 2. New Infrastructure (Growth – not DC eligible) 3. Rehab & Replacements	No Limit (amount will grow as levy grows, staff plans to push for increases to have more sustainable funding)
Canada Community Building Fund (CCBF)	Used for Core Assets (primarily roads and W-WW, but sometimes also used for facilities)	10-year agreement, funding provided in 5-year increments
Ontario Community Infrastructure Fund (OCIF)	Grant provided by the government used to fund Core Assets (primarily roads, bridges and condition assessments)	Will be updated in next census (2026) – available to municipalities with a population of 100,000 or less
Development Charges (DC)	Growth projects to the degree eligible in the DC Background study - Benefit to Existing (BTE) excluded	Current By-Law was updated in June 2024.
Rates (Storm)	Stormwater fees fund the maintenance and replacement of the Town's stormwater network	Approved annually
Capital Infrastructure Fee	Fixed quarterly charge based on resident property meter size used to cover the costs of maintaining water supply and delivery as well as wastewater collection and treatment	Approved annually

A summary of the 2025-2034 Capital Forecast renewal funding sources for each of the accounts below to support asset renewal needs for all assets is provided in Figure 6-1 below. Note that OCIF Funding is exclusive for municipalities under 100,000 in population and as the Town grows, it might become ineligible for this funding source in the future.

Figure 6-1: Town Renewal Funding Source Amounts (2025-2034 Capital Forecast)



6.2.1 Overall Town Asset Investment Gap

The following table provides a summary of the total asset management needs, available funding, and resulting infrastructure gap across the three core categories of investment: Growth, Renewal, and Operations and Maintenance (O&M). This breakdown is intended to clearly illustrate where funding shortfalls exist and to support evidence-based planning and prioritization decisions. Renewal needs reflect the investment required to maintain existing assets in a state of good repair; O&M needs represent the costs necessary to operate and maintain infrastructure at desired service levels; and growth needs account for the capital investment needed to support new development or increased demand. The investment gap is presented as the difference between the forecasted 10-year needs and the available funding in each category.

Table 6-2: Summary of Needs, Funding, and Investment Gap from 2024-2033

Category	10-Year Avg. Annual Need ($Millions)	10-Year Avg. Annual Funding ($Millions)	10-Year Avg. Annual Investment Gap ($Millions)	Ratio of Anticipated Funding to Needs
1. Growth	$40.1	$34.3	$5.8	86%
2. Renewal	$16.4	$12.3	$4.1	75%
3. O&M	$83.1	$78.4	$4.7	93%
Total	**$139.6**	**$125.0**	**$14.6**	**90%**

In total, the analysis identifies an average annual investment gap of $14.6 million over the 10-year planning horizon. This gap highlights the financial challenges faced in sustaining current and future service levels and reinforces the importance of long-term financial planning and funding strategy development.

6.2.2 Strategies to Close Funding Gap

The funding gap and associated impacts may be reduced by one or more of the following strategies:

- Reduce near term renewal needs by deferring capital renewal projects on lower risk assets, thereby lengthening the period in which the backlog is addressed beyond the 10 years. This may result in increased maintenance costs and risks to service delivery. If this occurs, it is recommended to increase the frequency of inspections on these assets to ensure safety is maintained.
- Maintain the 3% capital dedicated levy (as previously approved in prior budgets).
- Increase available funds through property tax increases and leveraging third party grants.
- Reduce renewal needs by divesting of assets. This may reduce service levels related to capacity.
- Invest and incorporate a robust predictive maintenance program that uses inspections to prevent failures before they occur.
- Optimize lifecycle interventions, especially for larger asset classes (roads, water, wastewater, facilities).
- Be strategic and mindful of growth investments, so as to not put an unfair burden for renewal on future generations.
- Increase the use of non-infrastructure solutions to manage the funding gap through management strategies and policies to allocate funds to the most critical assets.

Debt funding and reserve funding may also be used; however, these are not sustainable solutions, since the debt funding needs to eventually be paid back, and reserves need to be replenished.

7 Improvement Opportunities

7.1 Plan Improvement Opportunities

Development of an AM Plan is an iterative process that includes improving processes, data, processes, and staff skills over time. It is important that the Town recognizes areas of their AM Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The asset management improvement opportunities for the Town are shown in the table below.

Table 7-1: Asset Management Improvement Opportunities

No.	Service Area	Description
Improvements For the Next Asset Management Plan Update		
1	All	Operationalize AM Plan by using it to inform and populate the annual and forecasted budget.
2	All	Incorporate internal resource needs (operational and renewal impacts) to deliver recommended AM Plan capital growth projects.
3	All	Refine AM Plan growth projections based on updated Master Servicing Plans.
4	Community	Continue to collect data on remaining facilities, establishing a regular frequency program for BCAs.
5	IT	Develop and track a LOS measure related to software functionality to meeting user needs and business requirements
6	Transportation	Include future LOS related to other Transportation assets for % of assets within expected service life.
7	Fire & Emergency	Include a measure for Fire & Emergency Services related to *Overlapping calls with unavailable services* to support advocation for growth.
9	All	Implement a work order management system and supporting processes to improve: – tracking of refurbishment and replacement intervals for assets – more accurate forecasting of maintenance and operating costs
General Asset Management Planning Process Improvements		
9	All	Monitor current LOS and establish annual report to present current LOS performance against the LOS targets.
10	All	Continue to develop and formalize Asset Management governance structure.
11	All	Incorporate improvement inventory management system to better track acquisitions and disposals to ensure the asset inventory is current.

No.	Service Area	Description
12	All	Review approach to delivering capital projects to better align the available annual budgets with the volume of capital work that can be delivered.
13	All	Incorporate the operational impacts to the IT team from technology projects that are initiated by other departments and then managed long-term by the IT team.
14	All	Develop a centralized repository of asset data with common Asset IDs that are consistent across all Town assets.
15	All	Collect condition data on assets with unknown condition.
16	Community	Continue collecting and updating asset data for parks, fields, trails, vehicles, and equipment.
17	IT	Develop a methodology to value in-house developed software solutions.
18	Environmental	Link Asset IDs from the CCTV condition assessment to the centralized asset repository.
19	Environmental	Continue collecting condition information on Stormwater Ponds from internal staff while exploring the use of an external assessor to provide a more fulsome condition assessment.

7.2 AM Plan Monitoring and Review

The AM Plan will be updated every five years to ensure it reports an updated snapshot of the Town's asset portfolio and its associated value, age, and condition. It will ensure that the Town has an updated 10-year outlook including service levels, costs of the associated lifecycle strategies and as assessment of any funding shortfalls.

Per O.Reg. 588/17, the Town will conduct an annual review of its asset management progress in implementing this AM Plan and will discuss strategies to address any factors impeding its implementation. Additionally, the Town will report on the current performance of the LOS included in this AM Plan and the Town's ability or additional need required to meet the proposed LOS targets specified.

7.3 Performance Measures

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the long-term financial plan
- The degree to which the existing and target service levels and service consequences, risks, and residual risks are incorporated into the Strategic Planning documents and associated plans
- The Asset Renewal Funding Ratio achieving the Organizational target (this target is often 90 – 100%)

8 Transportation Services

8.1 Overview

Transportation Services ensures the sustainable management of essential infrastructure that supports mobility, safety, and environmental stewardship. Through a network of roads, sidewalks, walkways, bridges, and culverts, residents can travel efficiently and safely throughout the community. Additionally, stormwater assets, including ponds, oil-grit separators (OGS), pipes, and discharge points, help manage storm water flow and protect local ecosystems. By implementing strategic maintenance, rehabilitation, and replacement initiatives, the Town enhances the reliability and longevity of its transportation infrastructure. These efforts contribute to the overall safety, accessibility, and resilience of Stouffville, supporting a high quality of life for residents.

8.2 State of Infrastructure

The Town's transportation network consists of the assets shown in Table 8-1. Roads make up the majority of the transportation inventory, accounting for 81.7% of the total inventory as shown in Figure 8-1. The condition, age, and remaining service life of these assets (weighted by replacement value) are outlined in Figure 8-1.

Table 8-1: Inventory and Age Summary, Transportation Services

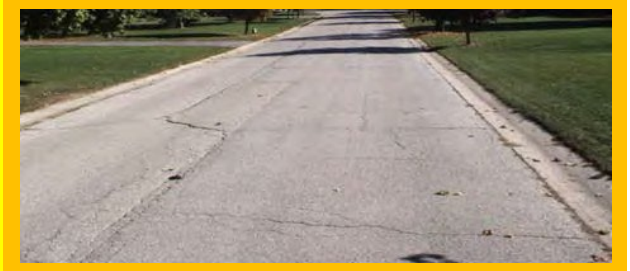
Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
Roads	$860.0	20	69
Sidewalks & Walkways	$41.7	20	50
Streetlights	$10.0	17	30
Signs & Signals	$4.3	22	22
Brides & Culverts	$30.9	19	60
Equipment	$0.6	8	12
Mains	$61.2	14	78
Discharge Points	$1.9	17	80
Oil Grit Separators	$0.4	16	80
Ponds	$42.1	--[2]	23
Total	**$1,053.0M**		

Effective asset management keeps transportation infrastructure functional and safe. Road conditions were provided from Road Matrix according to the PCI score assigned from a

[2] Stormwater Pond installation years were not consistently known at the time of the development of this AM Plan.

separate condition assessment. An example of what each condition grade for roads is provided in Table 8-2.

Table 8-2: Example Images to Correlate Road Condition

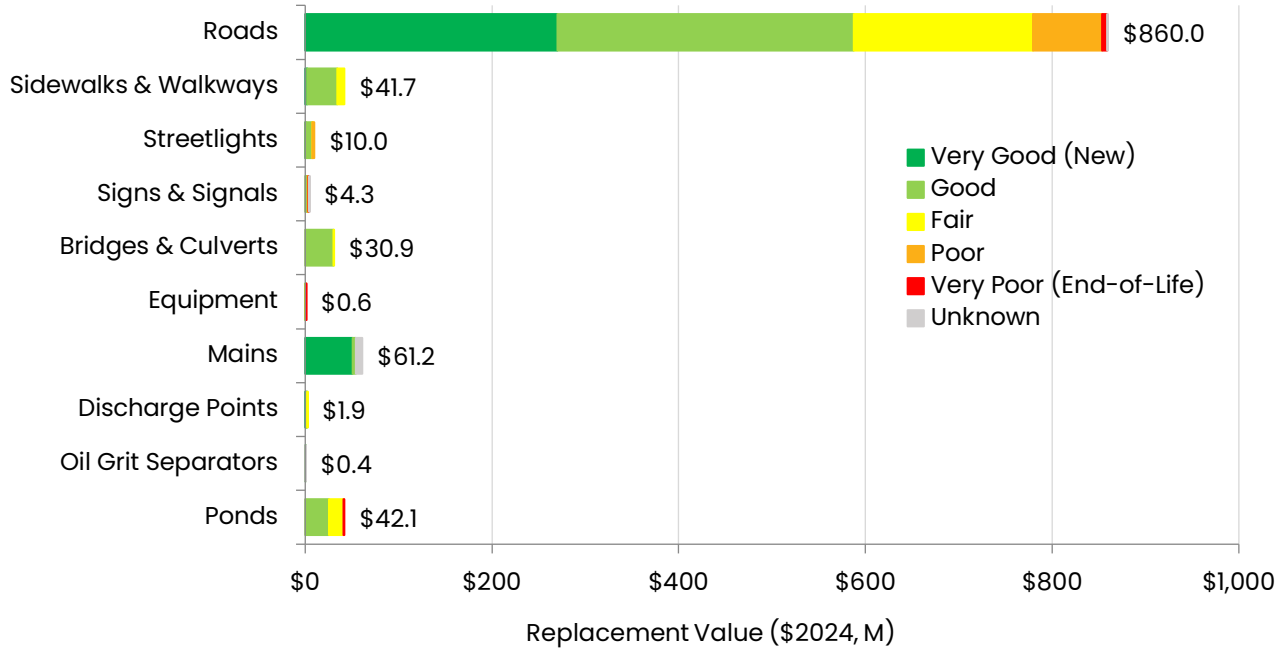
Very Good (PCI = 85 to 100) 	Good (PCI = 70 to 84) 
Fair (PCI = 50 to 69) 	Poor (PCI = 50 to 69) 
Very Poor (PCI = 0 to 29) 	

Bridges and culverts were assessed a condition score based on the 2024 OSIM report. All other asset conditions were assessed using their age and expected service life.

Figure 8-1 illustrates the condition distribution of the Town's Transportation Services assets, providing a graphical representation of their relative replacement value by asset category and the proportion of assets by condition grade.

Overall, 91.2% of Transportation Services assets are in fair or better condition, with only 0.7% classified as very poor. This reflects the Town's commitment to maintaining a reliable and well-functioning transportation network. Ongoing monitoring and strategic asset management will ensure continued service quality and infrastructure sustainability.

Figure 8-1: Condition Distribution by Replacement Value, Transportation



A portion of transportation assets also have an unknown condition status, emphasizing the importance of improved data collection and evaluation. These assets are detailed in the table below.

Table 8-3: Unknown Assets, Transportation Services

Asset	Replacement Value (2024$)
Gravel Roads	$819,024
Signs	$1,946
Stormwater Mains	$6,664,616
Oil Grit Separators	$242,180
Total	**$1,727,766**

8.3 Levels of Service

Table 8-3 provides a summary of the Community and Technical LOS for roads, structures, and stormwater infrastructure. Pavement Condition Index (PCI) and Bridge Condition Index (BCI) averages are weighted based on replacement value to provide a more accurate representation of overall asset performance.

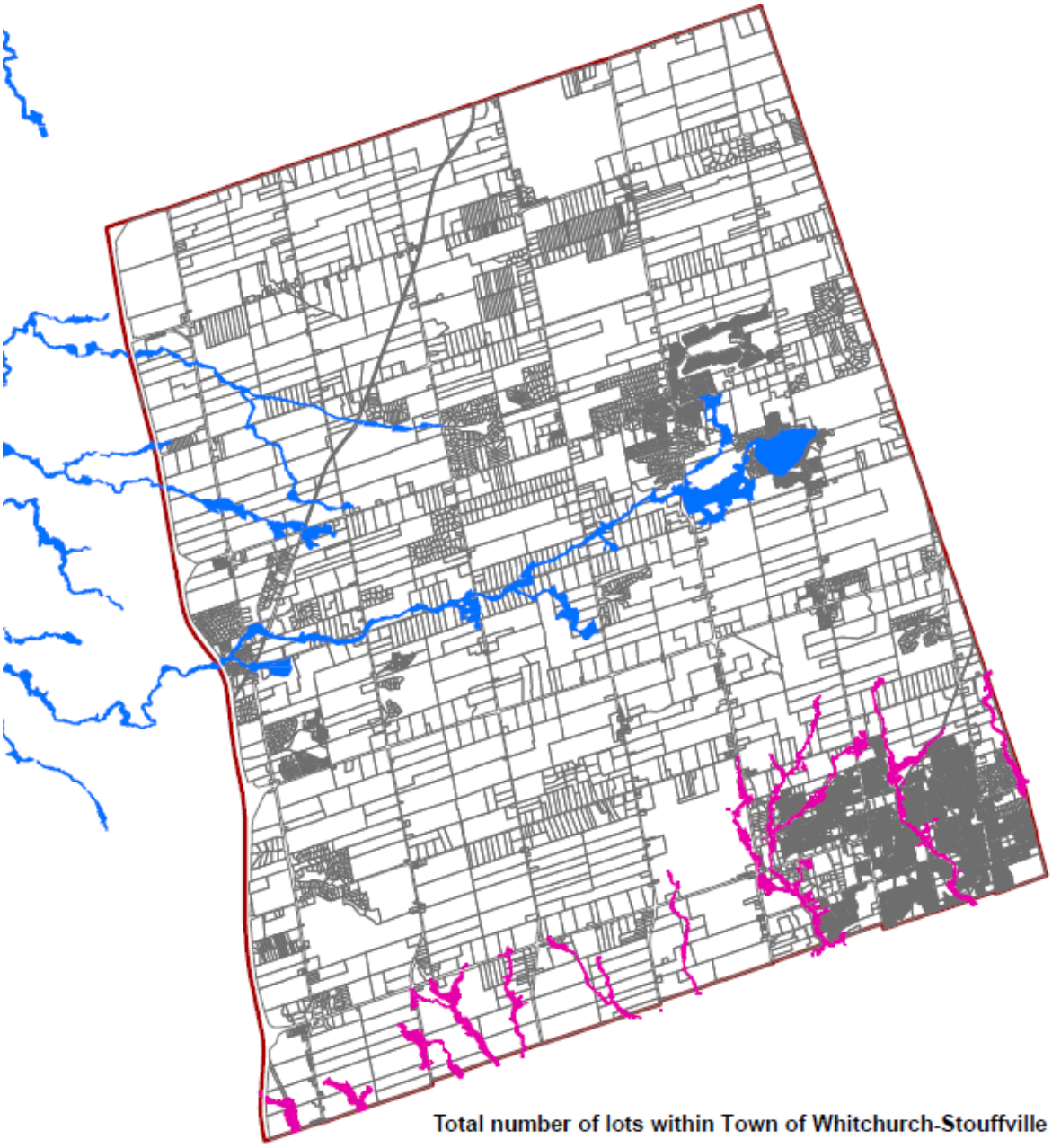
Table 8-3: Levels of Service, Transportation Services

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Capacity & Use (LOS)			
Road assets meet the needs of the users and the community.	Number of kms of each of arterial roads, collector roads and local roads as a proportion of square kms of land area of the municipality.	Arterial: 108.6 / 206.11 Collector: 50.8 / 206.11 Local: 337.5 / 206.11	Increase in alignment with Transportation Master Plan
Stormwater service meets the needs of the users and the community.	Percentage of properties in municipality resilient to a 100-year storm.[3]	% of properties = 96.3% Historical Flooded Areas include Vandorf Sideroad between Kennedy and Warden, Bethesda Sideroad between Warden and Tenth Line.	Increase in alignment with growth in properties and in coordination with the TRCA.
Function (LOS)			
Bridge & culvert assets meet the needs of the users and the community	Percentage of bridges in the municipality with loading or dimensional restrictions.	None	Maintain
Reliability (LOS)			
Road assets are safe and comfortable to use.	For paved roads in the municipality, the average pavement condition index value.	67.9 (Fair)	Maintain
	For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor).	Fair	Upgrade all these roads to hard surface
Bridge & culvert assets are safe and comfortable to use	For bridges in the municipality, the average bridge condition index value.	71.8 (Good)	Maintain

[3] The Town generally lies within two distinct watersheds. Duffins Creek watershed and Rouge watershed. Stormwater from the east areas of the Town contribute to Stouffville Creek and Reesor Creek within Duffins watershed. The west areas of the Town contribute to Little Rouge Creek within the Rouge watershed. The Town maintains a network of storm sewers, catch basins, and stormwater management ponds that protect areas from flooding and control water quality and quantity. The TRCA has identified the Rouge River watershed as requiring Level 1 protection; therefore, Total Suspended Solids (TSS) removal is required to be 80% or greater in wet ponds. A map illustrating the areas within the Town impacted from both 100-year storm and flood events is shown in Figure 8-2.

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
	For structural culverts in the municipality, the average culvert condition index value.	68.9 (Good)	Maintain
Stormwater service is safe and reliable	Percentage of the municipal stormwater management system resilient to a 5-year storm.	Not able to quantify at this time; storm sewers and ponds are designed for 5-year storms at the Town; however, further hydraulic modelling would be required to determine actual network resiliency.	
Transportation assets are safe and comfortable to use.	% of sidewalk & walkway assets within their expected service life	100%	Maintain

Figure 8-2: Lots Impacted by 100-Year Flood Events

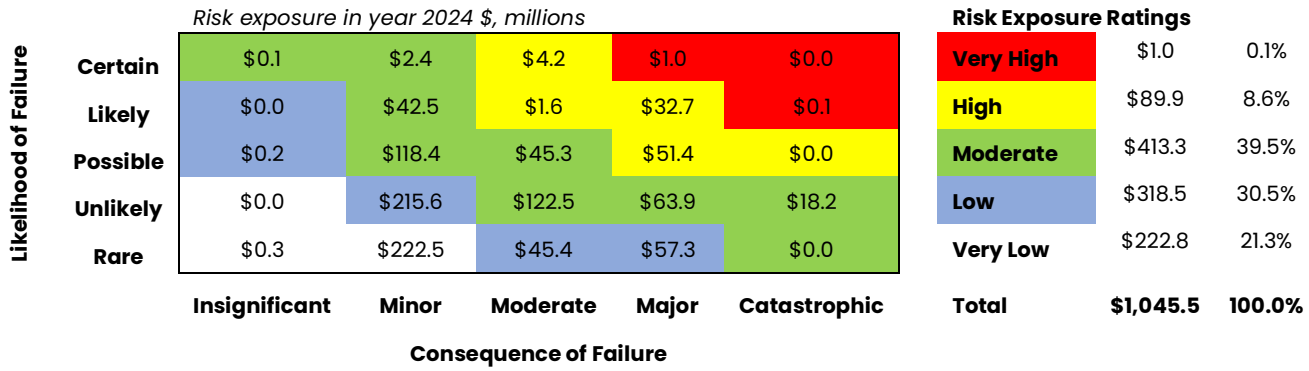


8.4 Risk Management Strategy

The risk map shown in Figure 8-3 combines Criticality (CoF) ratings with Condition (PoF) ratings for transportation infrastructure. Certain assets (signal structures & equipment, the

signal control system, and traffic signs) are identified as having Very High-risk exposure (red), indicating significant risk to the Town based on their current condition and criticality.

Figure 8-3 Risk Exposure of the Town's Transportation Services



Critical asset risks are those assessed with a risk rating of Very High. The mitigation plan, residual risk and mitigation costs of implementing the selected mitigation plan are shown in Table 8-4

Table 8-4. Risks and Associated Mitigation Plan

Asset	Risk	Risk Rating	Risk Mitigation Plan	Residual Risk *
Signal Structures & Equipment, and Control System ($1.0M)	Poor asset condition resulting in the inability to perform critical signal services	Very High	Renewal work to perform any necessary repairs or replacement of assets	Low
Traffic Signs ($0.1M)	Poor asset condition resulting in the limited or reduced visibility	Very High	Renewal work to perform any necessary repairs or replacement of assets	Low

* Note the residual risk is the remaining risk after the selected mitigation plan is implemented.

In addition to the asset risks identified above, the Town is managing multiple capacity and function risks as outlined in the following table.

Table 8-5. Capacity & Function Risks and Associated Mitigation Measures

No.	Risk	Mitigation Measures
1	**Extreme Weather Events:** Extreme weather events like flooding, freeze-thaw cycles, and temperature shifts accelerate surface deterioration, cause cracking and potholes, and weaken structures such as roads, bridges, and culverts—impacting performance and increasing maintenance demands.	• Staff are trained to manage extreme weather conditions. • The Town uses a localized weather provider (4 times per day) and they have access to their service desk to provide additional information. • The Town also uses the Region and MTO weather stations to get accurate weather information.

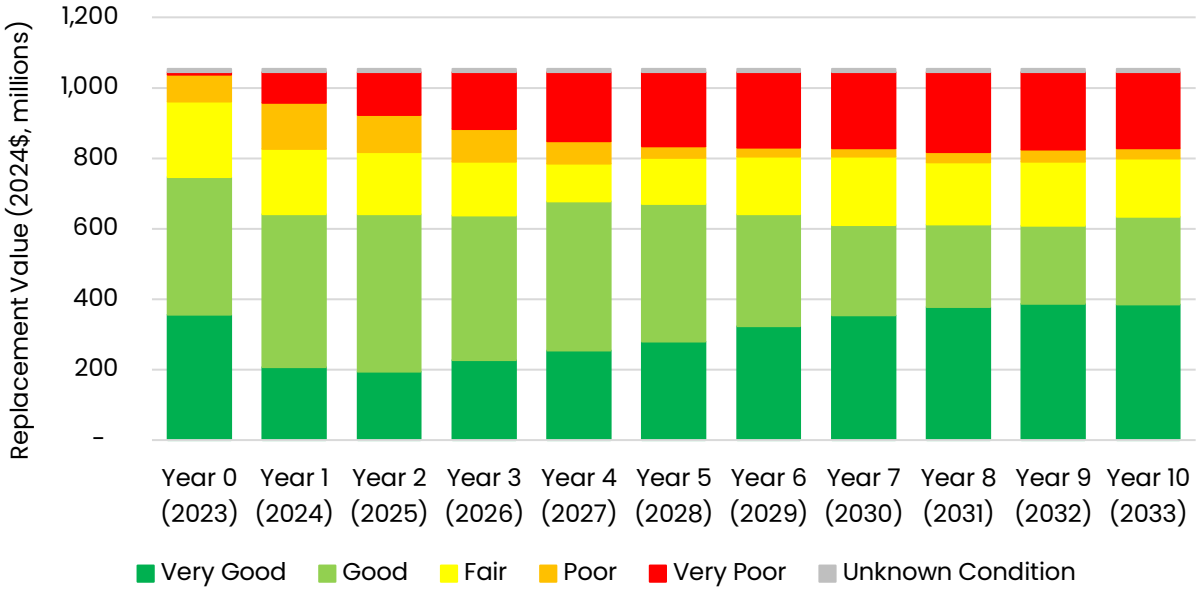
No.	Risk	Mitigation Measures
2	**Traffic Overload:** High traffic volumes and frequent congestion accelerate pavement wear and structural fatigue. Constant loading, especially from heavy vehicles, leads to surface cracking, rutting, and deformation—reducing the lifespan and performance of roads and related assets.	• There is a Right of Way management group at the Town that handles the load restriction program and limits.
3	**Cost Escalations:** Rising costs for materials, labour, and equipment increase the financial burden of maintaining and upgrading transportation assets. These escalations can delay critical work, reduce the scope of projects, and strain long-term capital planning.	• The Town employs a pavement degradation fee for any utility work that incorporates damages and costs related to their projects. • The Town compares bids from other regional municipalities for road infrastructure and fleet to ensure their bids are aligned to regional pricing. • They collaborate with other municipalities within York Region to share procurement information and have Piggy-Back or Coop contracts with other municipalities in York Region.
4	**Outdated Design Standards:** Older infrastructure may not be built to current performance, safety, or load-bearing requirements. This can result in inadequate lane widths, insufficient drainage, and limited structural capacity—making assets more susceptible to damage under modern traffic demands and environmental conditions.	• The engineering group is always updating design standards to ensure infrastructure meets the current needs and requirements. • Bridges are inspected bi-annually to ensure they are performing appropriately.
5	**Blockages and Maintenance Issues:** Debris accumulation from leaves, trash, and other debris can block drains and pipes.	• Conducting CCTV inspections on a grid system to map the system. If a section of the network is raised as a concern, that section would move up in priority. • There is a street sweeping & catch basin cleaning program that helps manage blockages. • The Town has a beaver management plan (this manages conflict with beavers and the management of stormwater management ponds) which includes routine inspection and relocation of the beavers causing the blockages. • The Town manages vegetation and removal of decay in stream and creeks and inlets and outlets.

8.5 Lifecycle & Financial Management Strategy

Figure 8-4 shows the condition profile for Transportation assets over the next 10 years based on planned budget funding. Renewal needs were based on the outputs from Road Matrix for roads, the OSIM report for bridges and culverts, and installation year and age for all other

assets. The average annual renewal budget is estimated at $4.5 million per year for the period 2024-2033 resulting in the percentage of very poor condition assets increasing from 1% in 2024 to 21% in 2033. To maintain the pavement condition and other Transportation asset condition, the Town would need to spend $5.8 million per year for asset renewal. Based on planned funding levels, the Transportation Service assets are expected to deteriorate over the analysis period.

Figure 8-4: Planned Budget Condition Forecast – Transportation Services



The average annual lifecycle cost for Transportation Service assets is estimated to be $48.1 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). The Town's planned renewal investment of $4.5 million per year in the renewal of Transportation Service assets from 2024-2033 will be insufficient to address the renewal needs in the years beyond the analysis period.

9 Environmental Services

9.1 Overview

The Town's Asset Management Plan for Environmental Services ensures the sustainable management and long-term reliability of the critical infrastructure that supports clean water distribution, wastewater collection, and environmental protection.

The Town's environmental services infrastructure includes water mains, wastewater pipes, valves, hydrants, and other wastewater assets, all of which are essential for delivering safe drinking water, managing wastewater efficiently, and protecting public health and the environment. Through proactive maintenance, rehabilitation, and asset renewal strategies, the Town aims to enhance the efficiency, resilience, and longevity of its water and wastewater systems. These efforts support regulatory compliance, environmental sustainability, and a high quality of life for Stouffville's residents, ensuring the continued safe and reliable operation of essential services.

9.2 State of Infrastructure

The Town's Environmental Services infrastructure consists of a total inventory valued at $386.5 million as outlined in Table 9-1. The condition, age, and remaining service life of these assets, weighted by replacement value, are summarized in Figure 9-1.

All Environmental Service asset conditions were assessed using their age and expected service life.

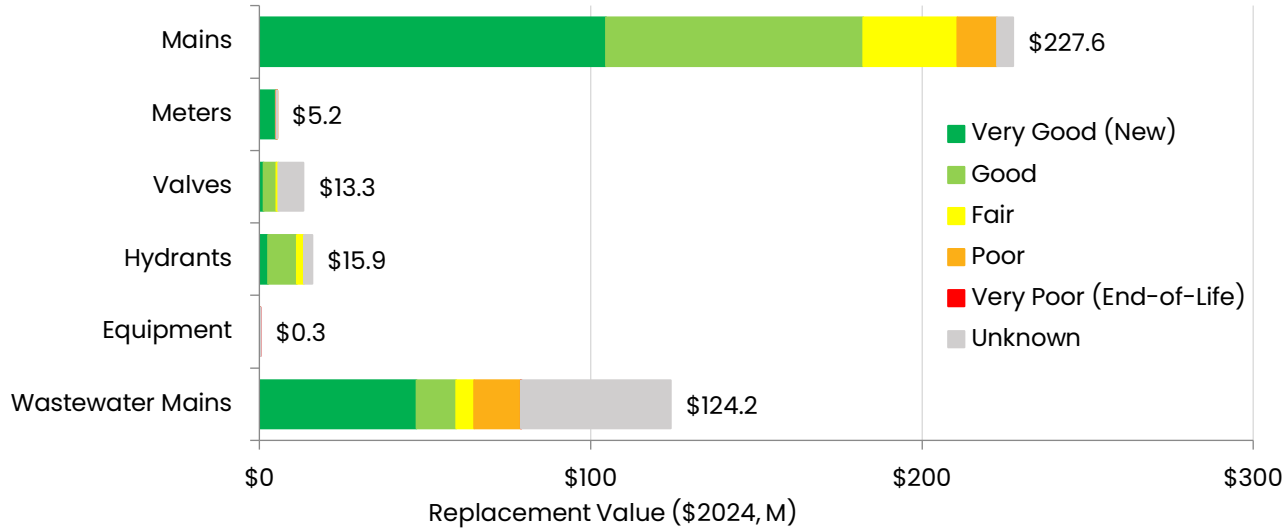
Table 9-1: Inventory and Age Summary, Environmental Services

Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
Mains	$227.6	27	80
Meters	$5.2	4	20
Valves	$13.3	15	51
Hydrants	$15.9	22	60
Equipment	$0.3	4	4
Wastewater Mains	$124.2	27	80
Total	**$386.5M**		

Figure 9-1 illustrates the condition distribution of the Town's Environmental Services assets, providing a graphical representation of their relative replacement value by asset category and the proportion of assets by condition grade.

Overall, 77.6% of Environmental Services assets are in fair or better condition, with 0% classified as very poor. Additionally, 15.6% of assets have an unknown condition rating, highlighting the need for further assessment and data collection to ensure effective asset management.

Figure 9-1: Condition Distribution by Replacement Value, Environmental Services



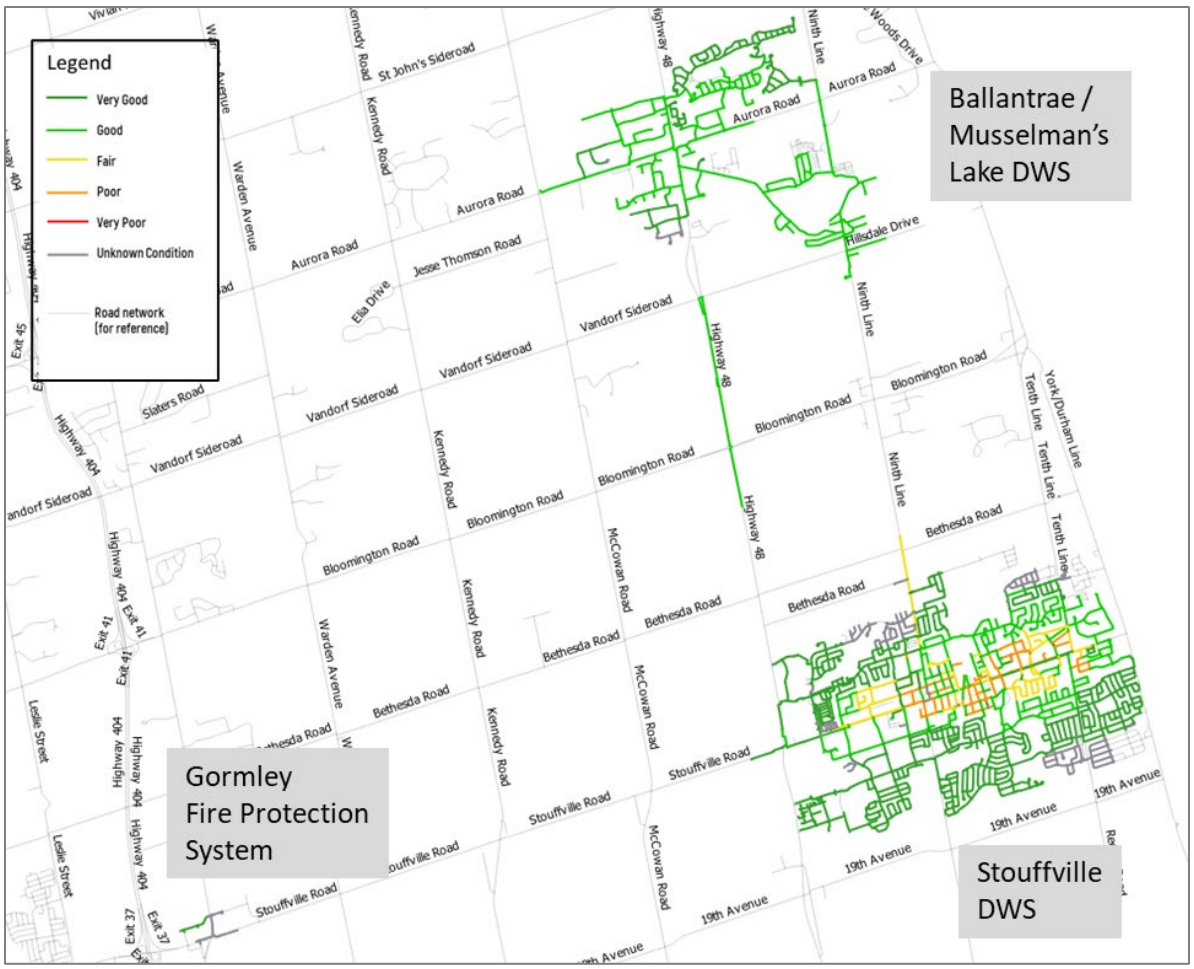
The majority of assets with an unknown condition status—98.6%—belong to Environmental Services, indicating a critical need for targeted data collection efforts. There are plans in place to improve the understanding of asset condition through assessments in the coming years. These assets are outlined in the table below.

Table 9-2: Unknown Assets, Environmental Services

Asset	Replacement Value (2024$)
Water Mains	$4,971,069
Meters	$1,812
Valves	$7,503,836
Hydrants	$2,443,120
Equipment	$38,378
Wastewater Mains	$45,271,686
Total	**$60,229,901**

A map of the Town's water main system by condition is provided in the figure below.

Figure 9-2: Map of Town Water Main System by Condition



A map of the Town's wastewater main system by condition is provided in the figure below.

Figure 9-3: Map of Town Wastewater Main System by Condition

9.3 Levels of Service

Table 9-2 summarizes the Community and Technical LOS for Environmental Services. The Town aims to ensure water and wastewater infrastructure continues to meet regulatory and service expectations.

Table 9-2: Levels of Service, Environmental Services

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Capacity & Use (LOS)			
Water service meets the needs of the users and the community.	Percentage of properties connected to the municipal water system	74.9% (13,826/ 18,452* prop.)	Increase in alignment with population growth

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
	Percentage of properties with fire flow	75.0% (13,848 / 18,452* prop.)	Increase in alignment with population growth
Wastewater service meets the needs of the users and the community.	Percentage of properties connected to the municipal wastewater system	63.3% (11,683 / 18,452* prop.)	Increase in alignment with population growth
Reliability (LOS)			
Water service is safe and reliable.	The number of connection-days per year where a boil water advisory is in place, compared to the total number of properties connected.	0	Maintain
	The number of connection-days per year due to water main breaks, compared to the total number of properties connected	3 breaks totaling 8.25 hrs = 0.34 connection days	Maintain
Wastewater service is safe and reliable.	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system	0	Maintain

*Note: 18,452 households from 2023 DC background study

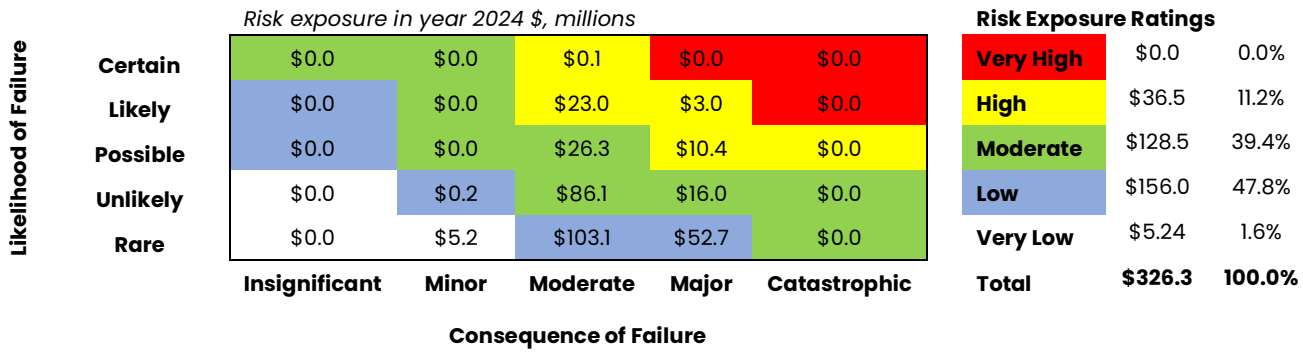
9.4 Risk Management Strategy

The risk map shown in

Figure 9-4 combines Criticality (CoF) ratings with Condition (PoF) ratings for Environmental Services infrastructure. Critical asset risks are those assigned a Very High-risk rating. Currently, no assets are identified with a Very High-level of risk exposure.

To mitigate this risk, the Town is advised to implement appropriate lifecycle interventions and management strategies to ensure these critical environmental assets remain functional, reliable, and compliant with service and regulatory standards.

Figure 9-4: Risk Exposure of the Town's Environmental Services



The Town is managing multiple capacity and function risks as outlined in the following table.

Table 9-3: Capacity & Function Risks and Associated Mitigation Measures

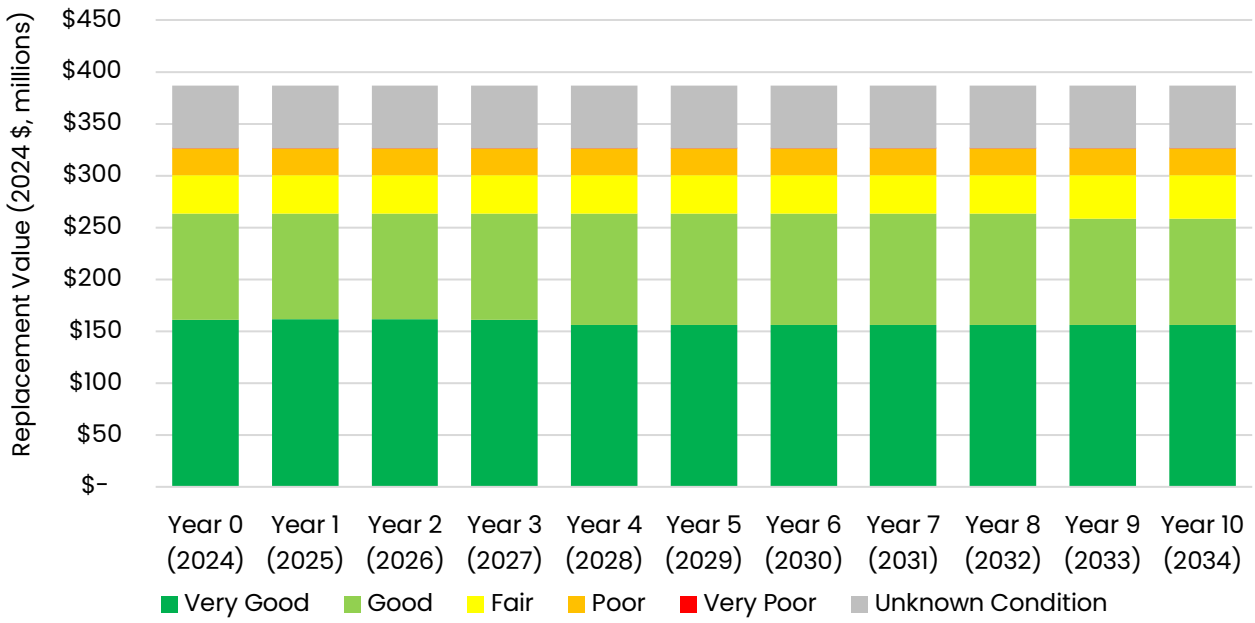
No.	Risk	Mitigation Measures
1	**Climate Change:** More frequent and intense storms, droughts, and flooding can damage pipelines, treatment plants, and storage facilities.	• The Town completes water inspections per MECP guidelines and sanitary and storm inspections using spot checks, CCTV, and systematic flushing. Additionally, Inflow & Infiltration (INI) inspections are occurring in partnership with Region to test for groundwater leaking into wastewater pipes. • Use a digital tool to support tracking improvement areas in the network which informs the upcoming capital projects.
2	**Overuse and Demand Growth:** Population growth and over-extraction of resources strain existing infrastructure.	• Coordination with operations is occurring more frequently when planning capital projects to ensure needs are being met. • The Master Plan outlines future projects to meet growth demands.
3	**System Failures:** Failures in automation, sensors, or software used for monitoring and treatment can disrupt operations.	• Inspections are completed as described above. • Treatment and monitoring is done by the Region and there is a good relationship, enabling the correction of any issues quickly.
4	**Funding:** Limited and inconsistent funding can hinder the ability to maintain, upgrade, and expand Water and Wastewater infrastructure. This affects system reliability, delays critical repairs, and increases the risk of service interruptions and environmental impacts.	• There is a small user rate that is currently being reviewed to include all residents and commercial customers instead of just water users to support more sustainable funding.

9.5 Lifecycle & Financial Management Strategy

Figure 8-419 shows the condition profile for Environmental assets over the next 10 years based on planned budget funding. Renewal needs were based on the installation year, age, and condition of all assets. An average annual renewal budget of $1.9 million has been allocated

for the period 2024–2033, which aligns with the estimated investment required to maintain current Environmental asset conditions. Most of this funding is allocated to projects that include road reconstruction to gain efficiency in capital delivery so that roads are not reconstruction multiple times within a short period. At this funding level, Environmental Service assets are expected to remain in stable condition over the analysis period.

Figure 19 9-5: Planned Budget Condition Forecast – Enviornmental Services



The average annual lifecycle cost for Environmental Service assets is estimated to be $5.3 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). The Town's planned renewal investment of $1.9 million per year in the renewal of Environmental Service assets from 2024-2033 will be insufficient to address the renewal needs in the years beyond the analysis period.

10 Community Services

10.1 Overview

Community Services in the Town enhance residents' quality of life by providing diverse opportunities for recreation, physical activity, and cultural engagement. The Town maintains a network of parks, open spaces, trails, and recreational facilities, offering access to outdoor activities, sports, and leisure pursuits that promote health and well-being. Cultural services further enrich the community by supporting arts, heritage, and entertainment through engaging programs, events, and initiatives. These services foster a strong sense of identity, creativity, and social connection, contributing to the Town's vibrancy and appeal.

Effective asset management is essential to ensuring these spaces and facilities remain safe, accessible, and aligned with the community's evolving needs. Strategic investment in infrastructure renewal, maintenance, and program development will support the long-term sustainability of Stouffville's Community Services. By prioritizing these initiatives, the Town remains committed to maintaining a high standard of livability and enhancing the overall well-being of its residents.

10.2 State of Infrastructure

Assets supporting Community Services include recreation facilities, parkland improvements, playgrounds, pergolas, and various equipment. As the Community Services department oversees all municipal facilities, this section also incorporates facilities serving general administration, transportation and environmental services. Table 10-1 presents the estimated replacement value of $250.9 million, along with a detailed breakdown of the inventory by asset category. The average age and average service life of these assets, weighted by replacement value, are summarized in Table 10-1

Table 10-1: Inventory and Age Summary, Community Services

Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
Facilities - Community	$162.3	20	31
Facilities - Municipal Office	$33.4	13	34
Facilities - Transportation	$20.7	14	39
Parks Land Improvements	$24.6	12	26
Playgrounds & Pergolas	$6.2	12	15
Equipment	$3.8	9	13
Total	**$250.9M**		

Figure 10-1 presents the condition distribution of the Town's Community Services assets, illustrating the relative replacement value by asset category and the proportion of assets in each condition grade. Regular internal inspections are conducted on select assets, such as playgrounds, courts, and fields, to assess their condition and ensure safety and functionality. The condition rating for facilities was based on the Facility Condition Index (FCI) which was

calculated according to the following equation and translated to a 1-5 condition rating according to

Table 2-2.

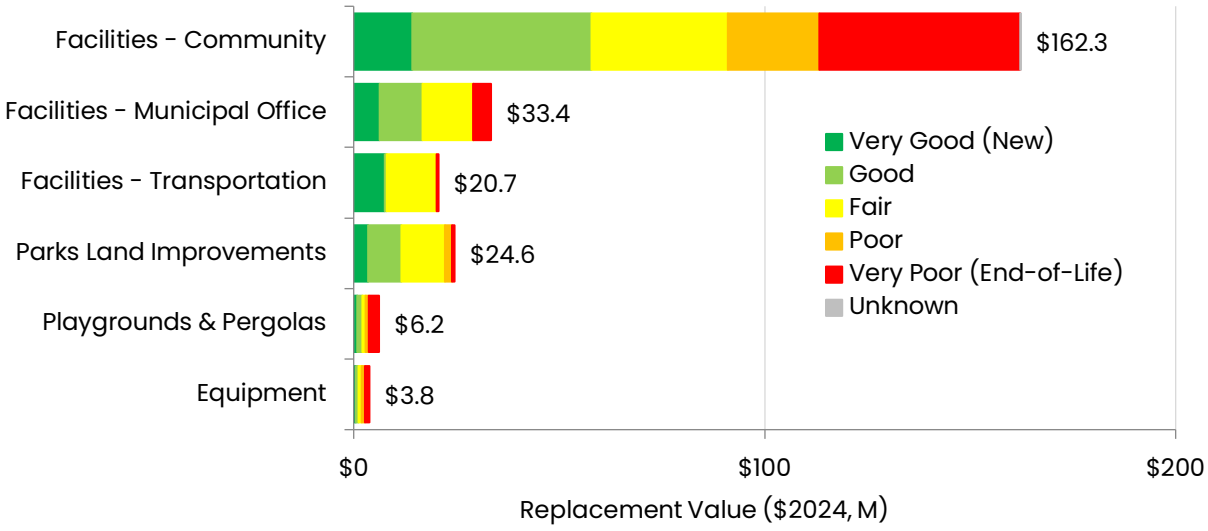
$$\textbf{\textit{Facility Condition Index}} = \frac{\textbf{\textit{Current Need + Planning Years 1 \& 2 Needs}}}{\textbf{\textit{Current Replacement Value}}}$$

The confidence in the condition rating for facilities was low as BCAs have not been completed for most facilities and where they have been competed, the assessments were done over five years ago. The Town is aware of this challenge and has a plan to conduct BCAs for all facilities over the next three years.

The condition rating for all other non-facility assets was based on an assets age and expected service life.

Currently, 66.8% of Community Services assets are rated in fair or better condition, while 23.1% are classified as being in very poor condition. Assets that have exceeded their expected service life fall under this category and may require targeted maintenance, rehabilitation, or replacement to maintain service levels and operational reliability.

Figure 10-1: Condition Distribution by Replacement Value, Community Services



A small portion of Community assets also have an unknown condition status, emphasizing the importance of improved data collection and evaluation. This will occur through the planned BCAs that will be conducted over the next few years. These unknown condition assets are detailed in the table below.

Table 10-2: Unknown Assets, Community Services

Asset Category	Asset	Replacement Value (2024$)
Facilities	Various Ballantrae Community Centre Facility Components	$7,383
Total		**$7,383**

10.3 Levels of Service

Table 10-2 outlines the Community and Technical LOS for Community Services. The Town is committed to sustaining LOS by ensuring Community Services assets remain safe, accessible, and aligned with community needs. Ongoing maintenance, strategic investments, and regular assessments help preserve asset quality and service reliability. As part of its long-term planning, the Town is targeting the proposed LOS indicated to address evolving community demands and growth. Future investments will be guided by asset condition data, community feedback, and financial sustainability to ensure services continue to meet residents' expectations.

Table 10-2 Levels of Service, Community Services

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Capacity & Use (LOS)			
Community assets meet the needs of the users and the community.	# of Ice Pads	4	1 / 12,500 population
	# of Indoor Pools	1	1 / 35,000 population
	# of Gymnasiums	1	1 / 35,000 population
	# of Fitness Centres	1	1 / 35,000 population
	# of Indoor Field Houses	0	1 / 50,000 population
	# of Community Centres	5	1 / 15,000 population
	# of Soccer Fields	9	1 / 2,500 population
	# of Ball Diamonds	9	1 / 4,000 population
	# of Ball Hockey Rinks	6	No target
	# of Tennis Courts	14	1 / 5,000 population
	# of Pickleball Courts	8 (Designated)	1 / 5,000 population
	# of Cricket Pitches	1	Maintain
	# of Outdoor Ice Rinks	8	This is a volunteer run program and will provide as many outdoor rink as volunteers allow.
	# of Spray Pads	7	1 / 2,000 children
	# of Playgrounds	42	Walkable access within 500 m of residences
	# of Basketball Courts	10	1 / 800 youth

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
	# of Skate Parks	1	1 / 5,000 youth
	Parkland per 1,000 population	Future	Increase in alignment with updated Parks Plan in 2025
Function (LOS)			
Community assets are accessible and support environmental sustainability.	Annual electricity consumption per sq.ft.	14-16 kwh/sqft[4]	Maintain
	Annual water consumption per sq.ft.	0.055-0.060 m^3/sqft[4]	Maintain
	Annual natural gas consumption per sq.ft.	2.1-2.2 m^3/sqft[4]	Maintain
	% of facilities sqft with accessibility audits completed	76.7%	Increase
Reliability (LOS)			
Community assets are safe and comfortable to use	% of assets in fair or better condition (excluding designated Heritage assets).	65.2%	Maintain
	% of work orders unresolved/total work order requests	Future	

10.4 Risk Management Strategy

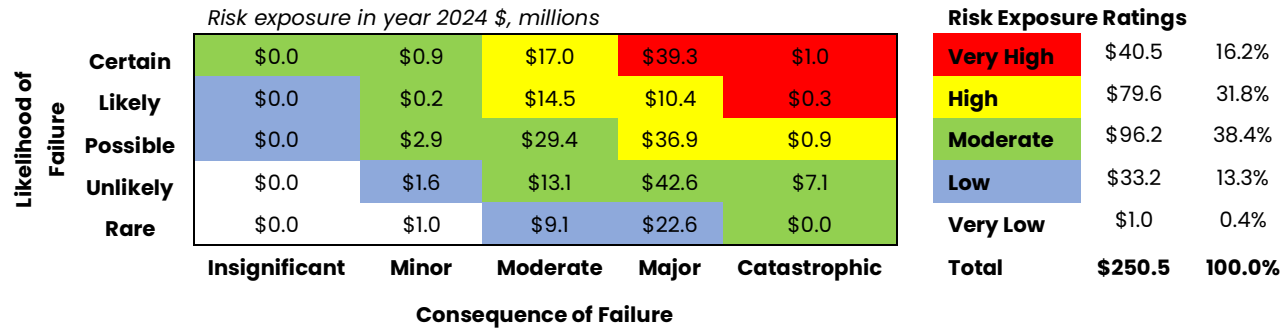
The risk map in

[4] The Town is working to improve the data for electrical, water, and gas consumption across all facilities and these measures will be more precise in future AM Plans.

Figure 10-2 combines Criticality (CoF) ratings with Condition (PoF) ratings to assess infrastructure risk within the Community Services portfolio. Certain facility components, including those at the Whitchurch-Stouffville Museum, Leisure Centre, and the Lemonville and Ballantrae Community Centres, are identified as having Very High-risk exposure (red). This indicates a significant risk to the Town based on the current condition and criticality of these assets. To mitigate this risk, the Town is advised to implement appropriate lifecycle interventions and management strategies. Proactive measures such as preventive maintenance, asset rehabilitation, and long-term capital planning will help ensure these critical facilities remain safe, functional, and aligned with community service expectations. Additionally, the Town will be conducting BCAs in the coming years to get a clearer understanding of upcoming facility needs to improve their management of facility component risks.

Appendix A provides a detailed listing of the Criticality (CoF) assessment scores for the Town's Community Services assets.

Figure 10-2: Risk Exposure of the Town's Community Services Assets



Critical asset risks are those assessed with a risk rating of Very High. The mitigation plan, residual risk and mitigation costs of implementing the selected mitigation plan are shown in Table 8-4.

Table 10-3. Risks and Associated Mitigation Plan

Asset	Risk	Risk Rating	Risk Mitigation Plan	Residual Risk *
Facility Components at the Ballantrae Community Centre, Leisure Centre, Operations Centre, Stouffville Arena, Stouffville Clippers Sports Complex, Municipal Office, Whitchurch-Stouffville Museum ($36.7M)	Poor asset condition resulting in the inability to provide facility services	Very High	Renewal work to perform any necessary repairs or replacement of assets. Conducting BCAs to have a clear understanding of facility needs.	Low
Park Amenities and Structures: ($3.1M)	Poor asset condition resulting in functionality concerns for park amenities and structures	Very High	Renewal work to perform any necessary repairs or replacement of assets.	Low
Equipment ($0.7M)	Poor asset condition resulting in the inability to use equipment to support parks and facility services	Very High	Renewal work to perform necessary replacements of assets.	Low

* Note the residual risk is the remaining risk after the selected mitigation plan is implemented.

In addition to the asset risks identified above, the Town is managing multiple capacity and function risks as outlined in the following table.

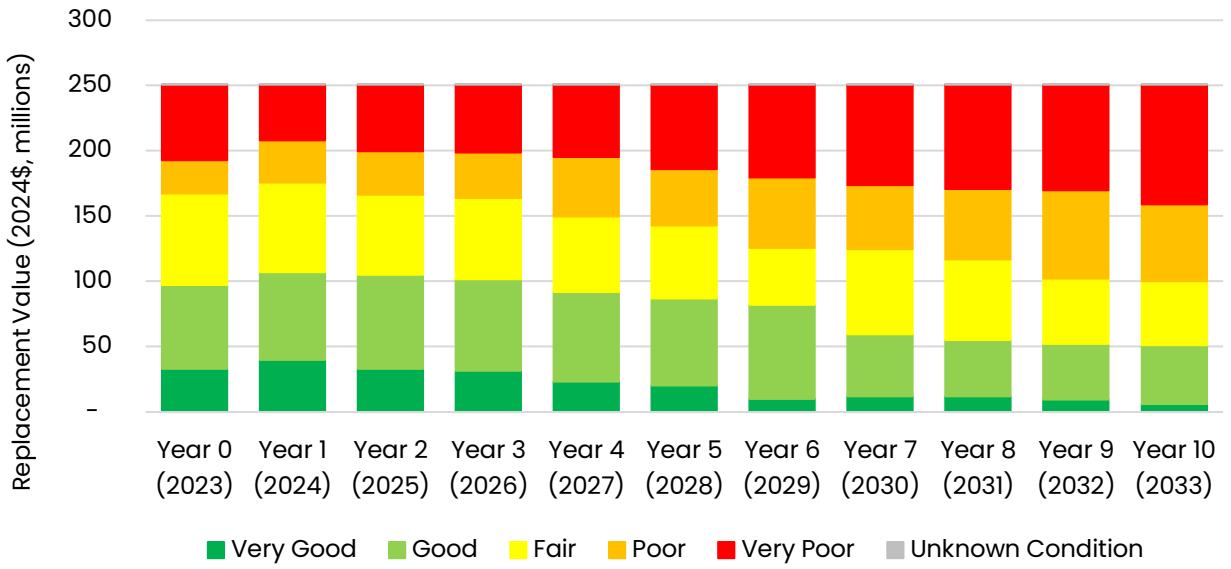
Table 10-3: Capacity & Function Risks and Associated Mitigation Measures

No.	Risk	Mitigation Measures
1	**Climate Change:** Facilities face damage from climate-related events like flooding, extreme temperatures, and storms, which can affect structures and essential systems. Geological issues like soil instability and biological threats such as pests and mold further threaten infrastructure integrity.	• Currently conducting a study to increase the Town's tree planting program and working with conservation authorities to develop canopy coverage recommendations and best practices. • Using Low Impact Developments in new development areas. • Working to acquire natural heritage lands through gratuitous donations. • Work closely with the conservation authority to manage to the high water table in the area. • Recently completed an energy audit to support different lighting sources.
2	**Design Inefficiencies:** Poorly designed facilities may struggle with accessibility, energy efficiency, or adapting to new uses	• Use measures for accessibility and energy use and are looking to incorporate LEED into new facilities. • Raising awareness of needs through energy and accessibility audits. • Review and ensure there are enough accessible components within play structures and making sure they are meeting AODA requirements.
3	**System Failures:** Power outages or IT disruptions can incapacitate key services and operational workflows	• Adding generators to large facilities to accommodate emergency needs. • Adding serge protection to larger equipment to minimize downtime.
4	**Security Threats:** Theft, vandalism, or cybersecurity breaches can endanger both physical and digital assets.	• Exploring security systems around parks and facilities to monitor and address vandalism. • Upgrading existing security systems to allow for facial recognition and increased monitoring. • Incorporated staff training at the front counter to mitigate threats.

10.5 Lifecycle Management Strategy

Figure 8-4 shows the condition profile for Community Service assets over the next 10 years based on planned budget funding. The average annual renewal budget is estimated at $2.2 million per year for the period 2024-2033 resulting in the percentage of very poor condition assets increasing from 23% in 2024 to 37% in 2033. To maintain the overall asset condition, the Town would need to spend $5.7 million per year for asset renewal. Based on planned funding levels, the Community Service assets are expected to deteriorate over the analysis period.

Figure 10-3: Planned Budget Condition Forecast – Commiunity Services



The average annual lifecycle cost for Community Service assets is estimated to be $8.4 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). The Town's planned renewal investment of $2.2 million per year in the renewal of Community Service assets from 2024-2033 will be insufficient to address the renewal needs in the years beyond the analysis period.

11 Fire & Emergency Services

11.1 Overview

Fire and Emergency Services are responsible for fire prevention, suppression, and emergency response to protect lives, property, and the environment. Highly trained firefighters operate firefighting equipment, respond to emergencies such as fires, medical incidents, and hazardous material spills, and conduct public education and safety programs. Additionally, fire services collaborate with other emergency response agencies to ensure effective coordination during crises and disasters, serving as a critical component of public safety infrastructure within the community.

11.2 State of Infrastructure

Fire and Emergency Services are supported by critical assets, including fire station facilities, fleet, and specialized equipment such as personal protective, respiratory, and rescue gear. Table 10-1 provides a comprehensive overview of these assets, detailing an estimated replacement value of $38.5 million along with a breakdown by asset category. The average age and projected lifespan of these assets, weighted by replacement value, are also summarized in Table 10-1. Assets that have surpassed their expected service life, such as fleet vehicles, are classified as being in “very poor condition” within their respective condition profiles. To ensure operational readiness and service reliability, these assets may require targeted maintenance, rehabilitation, or replacement.

Table 11-1: Inventory and Age Summary, Fire and Emergency Services

Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
Fleet	$12.0	8	14
Equipment	$2.7	8	13
Facilities - Fire Stations	$23.8	18	60
Total	**$38.5M**		

Figure 11-1illustrates the condition distribution of the Town’s Fire and Emergency Services assets, providing a graphical representation of their relative replacement value by asset category and the proportion of assets by condition grade.

The condition rating for Fire facilities was based on the Facility Condition Index (FCI) which was calculated according to the following equation and translated to a 1-5 condition rating according to

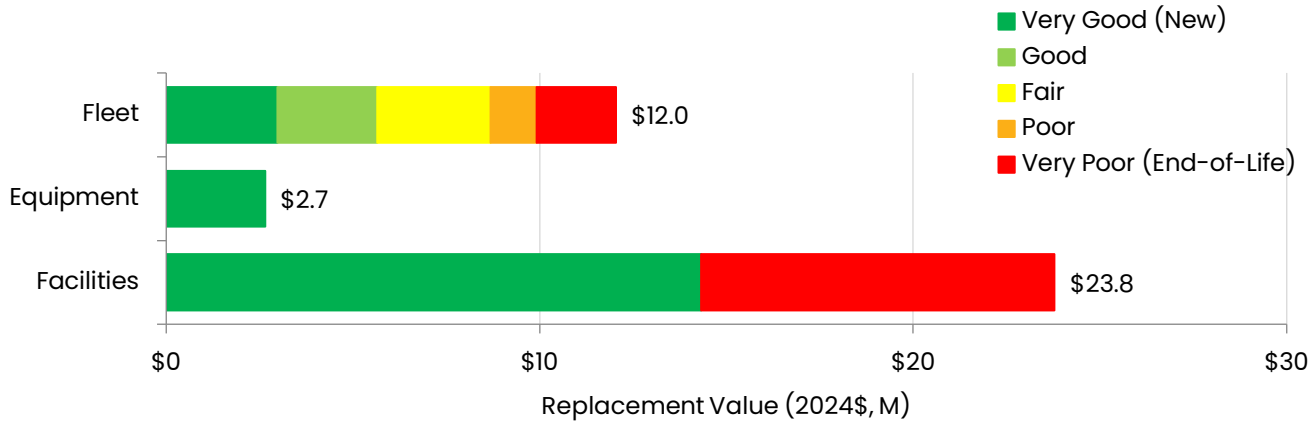
Table 2-2.

$$\textbf{\textit{Facility Condition Index}} = \frac{\textbf{\textit{Current Need + Planning Years 1 \& 2 Needs}}}{\textbf{\textit{Current Replacement Value}}}$$

The condition rating for all other non-facility assets was based on an assets age and expected service life.

Overall, 66.7% of Fire and Emergency Services assets are in fair or better condition, while 30.1% are classified as being in very poor condition.

Figure 11-1: Condition Distribution by Replacement Value, Fire & Emergency Services



Note: Fire Station facility condition has been reported based on component information from 2018 BCA. Fire Station #52 as a whole is in Very Poor condition and is planned for replacement in 2025.

11.3 Levels of Service

Table 11-2 outlines the Community and Technical Levels of Service (LOS) for Fire and Emergency Services, with a focus on asset condition and service reliability. These assets are essential for public safety, and the Town is committed to maintaining high service standards through proactive maintenance, strategic investments, and regular assessments.

In Stouffville, ensuring Fire and Emergency Services remain effective requires ongoing evaluation of fleet, equipment, and facility conditions. The Town prioritizes the replacement of aging vehicles and critical infrastructure to enhance response times and operational efficiency. Future investments will be guided by asset condition data, emergency response requirements, and financial sustainability to ensure the community continues to receive reliable and responsive fire protection services.

Table 11-2: Levels of Service, Fire and Emergency Services

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Capacity & Use (LOS)			
Fire & Emergency assets meet the needs of the community.	Total Calls	1,089	Increase in alignment with population growth
	Response Times – 90th Percentile (NFPA 1710)	Station 5-1: 9.73 min Station 5-2: 11.03 min	Improve
	Overlapping Calls	157	Decrease
Reliability (LOS)			
Fire & Emergency assets are safe to use.	% assets within their expected service life	70.2%	Maintain
	Total # of Public Education events	123	Increase with growth
	Total # of Plan Reviews	290	Increase with growth
	Total # of Fire Inspections	673	Increase with growth

11.4 Risk Management Strategy

The risk map in Figure 11-2 combines Criticality (CoF) ratings with Condition (PoF) ratings for Fire and Emergency Services assets within the Town's service area. Certain assets, including the older Spartan pumper and Fire Hall #52, are classified with Very High-risk exposure (red). This indicates significant risk to the Town due to the current condition and criticality of these assets. The mitigation plan, residual risk and mitigation costs of implementing the selected mitigation plan are shown in Table 8-4. These efforts will help maintain service reliability and minimize any disruptions to emergency response capabilities.

Figure 11-2 Risk Exposure of the Town's Fire & Emergency Services Assets

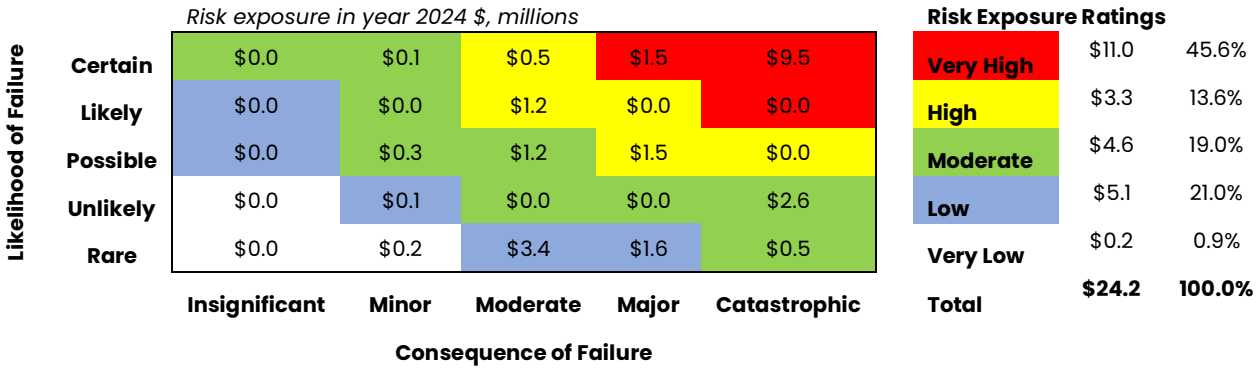


Table 11-3. Risks and Associated Mitigation Plan

Asset	Risk	Risk Rating	Risk Mitigation Plan	Residual Risk *
2008 Spartan Pumper ($1.5M)	Poor asset condition resulting in functionality or safety concerns	Very High	Replace Pumper within the next few years.	Low
Fire Station #52 ($9.5M)	Poor asset condition resulting in functionality or safety concerns	Very High	Replace Fire Hall in 2025-2026	Low

* Note the residual risk is the remaining risk after the selected mitigation plan is implemented.

In addition to the asset risks identified above, the Town is managing multiple capacity and function risks as outlined in the following table.

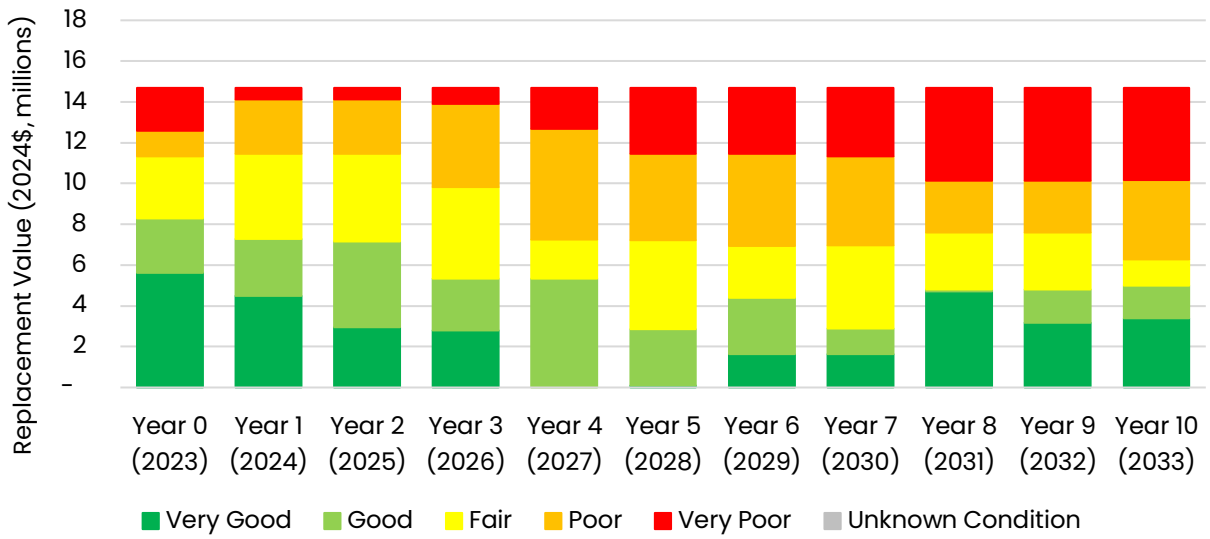
Table 11-4: Capacity & Function Risks and Associated Mitigation Measures

No.	Risk	Mitigation Measures
1	**Increased call Volume:** Rising populations and urban development increase the demand for fire, rescue, and medical services, potentially overburdening resources.	• Adjusting staffing deployments related to service delivery. • Reviewing several metrics on a daily basis to ensure service is being provided effectively.
2	**Outdated Systems:** Legacy systems may lack integration or efficiency, making operations cumbersome.	• Researching new communication technologies to provide upgrades to radio systems. • Currently working with the dispatch provider to have a new records management system.
3	**Rising Costs:** Increasing costs for equipment, technology, and personnel training strain budgets.	• Reviewing options for increasing service life for high valued assets and alternative manufacturers. • Reviewing fees and charges to provide additional revenue streams. • Investigating grants from various governing organizations.

11.5 Lifecycle Management Strategy

Figure 8-4 shows the condition profile for Fire and Emergency Service assets over the next 10 years based on planned budget funding. The average annual renewal budget is estimated at $1.8 million per year for the period 2024-2033 resulting in the percentage of very poor condition assets increasing from 14% in 2024 to 31% in 2033. To maintain the overall asset condition, the Town would need to spend $2.0 million per year for asset renewal. Based on planned funding levels, the Fire and Emergency Service assets are expected to deteriorate over the analysis period.

Figure 11-3: Planned Budget Condition Forecast – Fire & Emergency Services



The average annual lifecycle cost for Fire & Emergency Service assets is estimated to be $1.5 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). The Town's planned renewal investment of $1.8 million per year in the renewal of Fire and Emergency assets from 2024-2033 will be sufficient to address the renewal needs in the years beyond the analysis period.

12 Library Services

12.1 Overview

The library offers a diverse array of resources and programs designed to foster literacy, learning, and community engagement. Services include the lending of books, e-books, audiobooks, and other materials, providing public access to computers and Wi-Fi, hosting educational and cultural workshops, and offering reference and research support. Libraries function as inclusive spaces that welcome individuals of all ages and backgrounds, providing opportunities to explore, discover, and connect with information and ideas. Through these services, the library promotes lifelong learning and strengthens the social fabric of the community.

12.2 State of Infrastructure

Library Services are supported by a range of assets, including collections, furniture, institutional equipment, and technology. Table 11-1 outlines the estimated replacement value of these assets, totaling $3.0 million, along with a breakdown by asset category. The library collection constitutes the majority of the portfolio, accounting for 54.8%. The average age and expected lifespan of these assets, weighted by replacement value, are summarized in Table 12-1.

Table 12-1: Inventory and Age Summary, Library Services

Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
Books/Media	$1.7	4	7
Hardware	$0.1	4	5
Software	$0.0	4	5
Institutional Equipment	$0.5	5	9
Movable Furnishings - Library	$0.5	6	10
Bike Storage Facility	$0.1	1	20
Sub-Total	**$3.0M**		

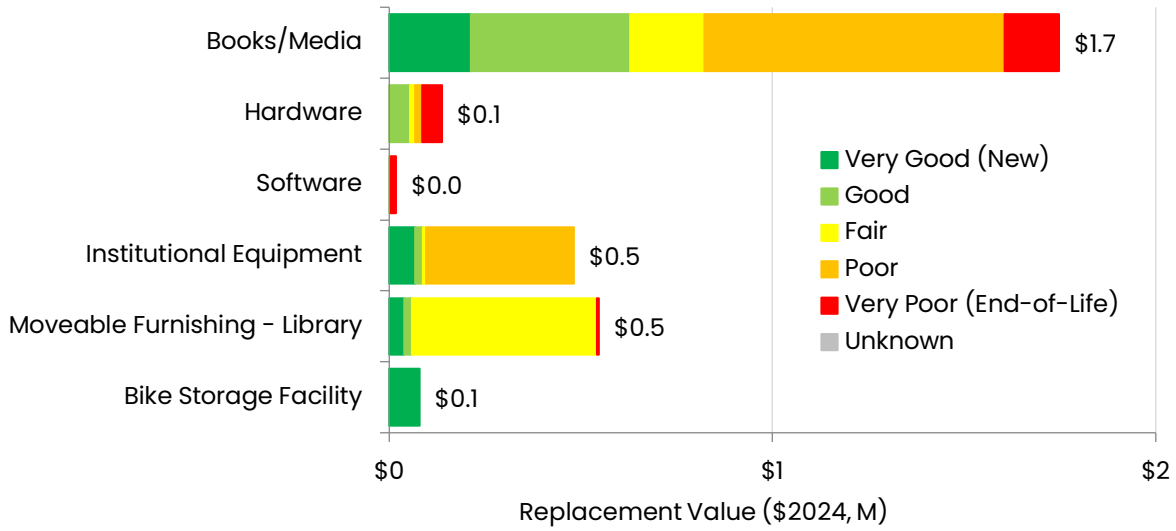
The Library facility at the Town is a shared space located within the Whitchurch-Stouffville Leisure Centre (which is captured under Community Services)

The condition distribution for the Town's Library Services assets are shown below in Figure 12-1. The figures graphically show the relative replacement value, by asset category, and the proportion of assets by condition grade.

The condition rating for all library assets was based on an assets age and expected service life. As Indicated the facility is captured in the Community Services section.

On average, 52.0% of Library Services assets are in fair or better condition. 6.9% are in very poor condition.

Figure 12-1: Condition Distribution by Replacement Value, Library Services



12.3 Levels of Service

Table 12-2 outlines the Community and Technical Levels of Service (LOS) for Library Services. These assets are crucial to supporting literacy, learning, and community engagement. The Town is dedicated to maintaining high service standards through proactive maintenance, strategic investments, and regular assessments.

In Stouffville, ensuring that Library Services remain effective requires continuous evaluation of collections, equipment, and facilities. The Town prioritizes the maintenance and replacement of aging assets to enhance service accessibility, user experience, and operational efficiency. Future investments will be informed by asset condition data, community needs, and financial sustainability, ensuring the library continues to provide reliable and valuable services to the community.

Table 12-2 Levels of Service, Library Services

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Capacity & Use (LOS)			
Library assets meet the needs of the community.	Square footage per capita	0.52	1 sq.ft. per capita
	Total # of active residents with active library cards	18,947	Increase in alignment with population growth (27.6% from 2024-2034)

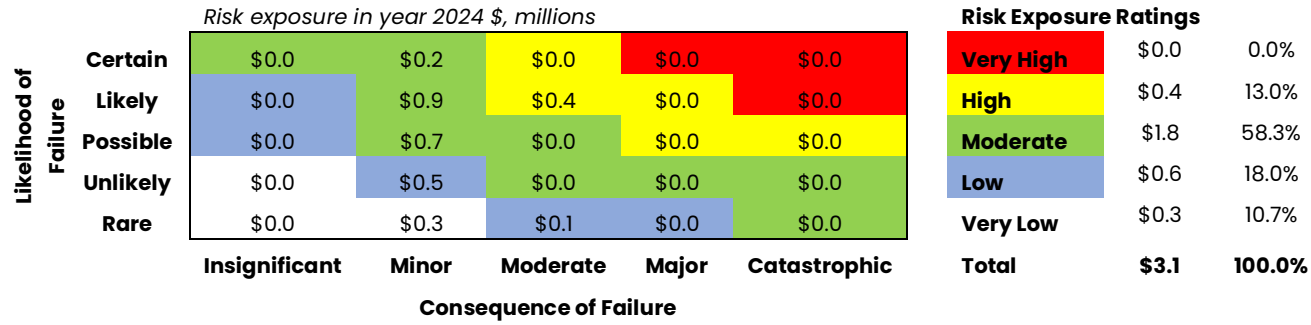
Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
	Circulation of library materials per capita	13	14
Reliability (LOS)			
Library assets are safe and comfortable to use.	% assets in fair or better condition	38.9%	Maintain
	Program offerings per 1000 residents	37	At Least 30
	Annual program attendance per capita	0.5	0.5
	Total in person visits	205,328	Increase by 3% annually[5]

12.4 Risk Management Strategy

Appendix A provides a detailed listing of the CoF assessment scores for the Town's Library Services assets.

The risk map shown in Figure 12-2 combines the Criticality (CoF) ratings with the Condition (PoF) ratings for infrastructure represented within the Service Area. No assets are shown as a Very High-risk exposure (red), meaning there is no very high-risk exposure to the Town for these assets based on current condition and criticality.

Figure 12-2 Risk Exposure of the Town's Library Services Assets



The Library is managing multiple capacity and function risks as outlined in the following table.

[5] This prospective increase is only reasonable with more branches.

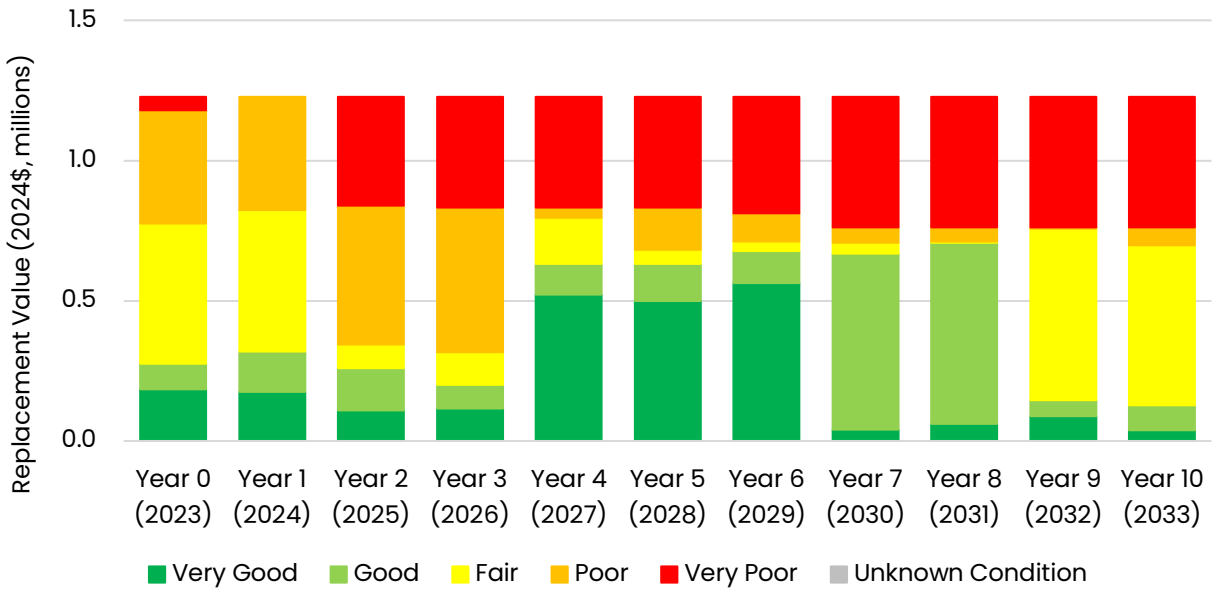
Table 12-3. Capacity & Function Risks and Associated Mitigation Measures

No.	Risk	Mitigation Measures
1	**Technological Obsolescence:** Rapid advancements in technology can render existing systems, such as computer hardware, software, and digital catalog systems, outdated, limiting the library's ability to serve the community effectively.	• Staff attend to library conferences at least annually and collaborate with other libraries to understand what is changing in the technology space. • Staff are on an Ontario Libraries technology committee with IT staff. • Invite vendors for regular updates on new technologies and plans for end-of-life assets. • Master Plan includes IT components.
2	**Environmental Hazards:** Libraries are vulnerable to risks like floods, fires, and extreme weather events, which can damage collections, equipment, and facilities.	• Monthly inspections for the facility for leaks or safety concerns. • Work closely with partners in Fire and Emergency services when any upgrades are being made.
3	**Funding Constraints:** Insufficient funding for maintenance, upgrades, or staffing can reduce the quality and scope of library services, impacting community satisfaction.	• The team is always trying to update the space to make the limited space be more functional to meet community needs. • Recently, the library has been utilizing temporary locations to try to meet the community's needs. • They limit programing based on available staff and space.
4	**Security Threats:** Theft, vandalism, or cybersecurity breaches can endanger both physical and digital assets, including rare collections and sensitive patron data.	• Work closely with Town partners to managed cyber security. • There is a staffing training program on mental health and dealing with homelessness to support physical safety. • There are security gates to manage thefts from the collection. • There is a privacy policy to protect patron data and all deposits are managed in line with Town policy.

12.5 Lifecycle Management Strategy

Figure 8-4 shows the condition profile for Library Service assets over the next 10 years based on planned budget funding. The average annual renewal budget is estimated at $0.08 million per year for the period 2024-2033 resulting in the percentage of very poor condition assets increasing from 4% in 2024 to 38% in 2033. To maintain the overall asset condition, the Library would need to spend $0.12 million per year for asset renewal. Based on planned funding levels, the Library Service assets are expected to deteriorate over the analysis period.

Figure 12-3: Planned Budget Condition Forecast – Library Services



The average annual lifecycle cost for Library assets is estimated to be $0.4 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). The Library's planned renewal investment of $0.08 million per year in the renewal of Library assets from 2024-2033 will be insufficient to address the renewal needs in the years beyond the analysis period.

13 Information Technology

13.1 Overview

IT services encompass the management and support of information technology infrastructure and systems to facilitate efficient and effective municipal operations. This includes maintaining networks, servers, and software applications; providing technical support to municipal staff; managing cybersecurity measures to protect data and systems; and implementing innovative technologies to enhance service delivery and citizen engagement. IT services play a critical role in enabling digital transformation, streamlining processes, and ensuring the security and reliability of municipal IT resources, ultimately contributing to the overall effectiveness and responsiveness of the municipality.

13.2 State of Infrastructure

Assets that support IT infrastructure include end user devices, server equipment and networking equipment. Table 13-1 shows the estimated replacement value of $5.3M and includes a breakdown of the inventory by asset category. The average age and estimated life of these assets, weighted by replacement value, are also summarized in Table 13-1.

Table 13-1: Inventory and Age Summary, Information Technology

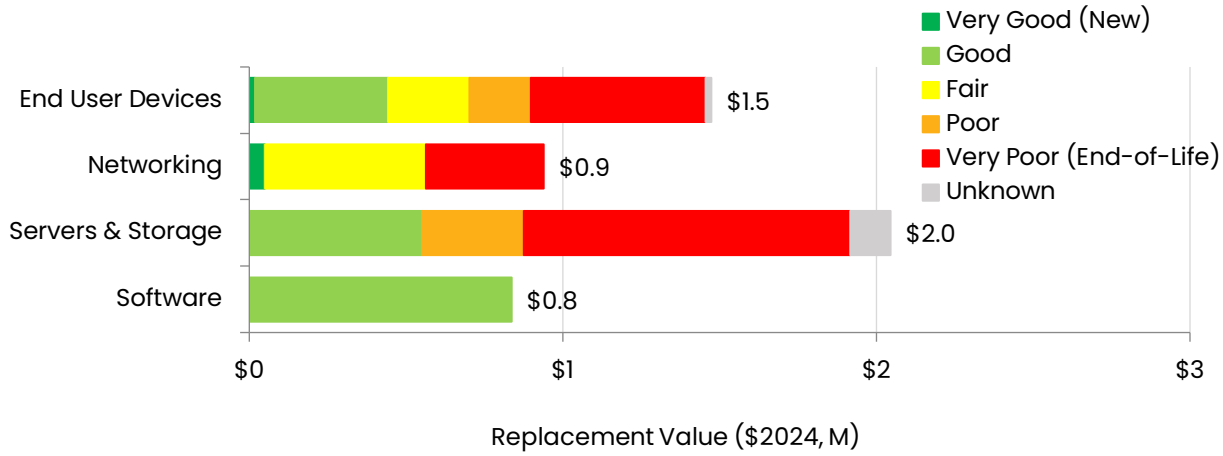
Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
End User Devices	$1.5	4	5
Server Equipment	$0.9	6	8
Networking Equipment	$2.0	7	5
Software	$0.8	1	5
Total	**$5.3M**		

Figure 13-1 illustrates the condition distribution of the Town's IT assets, providing a graphical representation of their relative replacement value by asset category and their proportion by condition grade.

The condition of IT assets was based on their age and expected service life. Unlike tangible infrastructure, software assets are categorized as being in "good" condition, as their physical state is less quantifiable compared to hardware components.

Overall, 50.1% of IT assets are in fair or better condition, while 37.3% are classified as being in very poor condition. This is largely due to the inherently short lifecycle of IT assets, where condition assessments based on age can change rapidly. Ongoing upgrades and proactive asset management are essential to maintaining reliable IT infrastructure and ensuring continued operational efficiency.

Figure 13-1: Condition Distribution by Replacement Value Information Technology



A portion of Information Technology assets also have an unknown condition status, emphasizing the importance of improved data collection and evaluation. These assets are detailed in the table below.

Table 13-2: Unknown Assets, Information Technology

Asset	Replacement Value (2024$)
Various PCs, Monitors, Printers, Peripherals, and Tablets	$18,420
Physical Servers	$130,000
Total	**$148,420**

13.3 Levels of Service

Table 13-3 outlines the Community and Technical LOS for Stouffville's IT Services. These assets are vital for supporting municipal operations and delivering efficient services to the community. The Town is committed to upholding high service standards through proactive maintenance, strategic investments, and regular assessments.

Ensuring the effectiveness of IT services in Stouffville necessitates continuous evaluation of hardware, software, and network infrastructure. The Town prioritizes the maintenance and timely replacement of aging assets to enhance system performance, cybersecurity, and operational efficiency. Future investments will be guided by asset condition data, technological advancements, and financial sustainability, ensuring that IT services continue to meet the evolving needs of the community and support the Town's strategic objectives.

Table 13-3: Levels of Service, Information Technology

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Capacity & Use (LOS)			
IT assets meet the needs of the users and the community.	Network utilization	60%	Maintain
	Network storage utilized	70%	<85%
Reliability (LOS)			
IT assets are safe and comfortable to use.	% end user device assets in very poor condition–based on warranty period	38%	<10%
	% network & server assets in very poor condition–based on warranty period	48%	<10%
	% incidents reported to the Service Desk + Help Centre responded to in a timely manner (1-day)	93%	Maintain

13.4 Risk Management Strategy

Appendix A provides a detailed listing of the CoF assessment scores for the Town's IT assets.

The risk map in

Figure 13-2 presents the Criticality (CoF) ratings alongside the Condition (PoF) ratings for Stouffville's Information Technology (IT) infrastructure. Key assets, including networks, servers, and storage systems, have been identified as having Very High-risk exposure (red). This classification indicates a significant risk to municipal operations due to the essential role these assets play in service delivery, data security, and overall system functionality.

To mitigate this risk, the Town is advised to implement proactive lifecycle management strategies, including regular system upgrades, redundancy planning, and cybersecurity enhancements. Ensuring the timely replacement and modernization of very high-risk IT assets will help maintain service continuity, protect critical data, and support the Town's long-term digital infrastructure needs. The specific mitigation plan for the very high-risk assets is provided in Table 8-4.

Figure 13-2 : Risk Exposure of the Town's Information Technology Assets

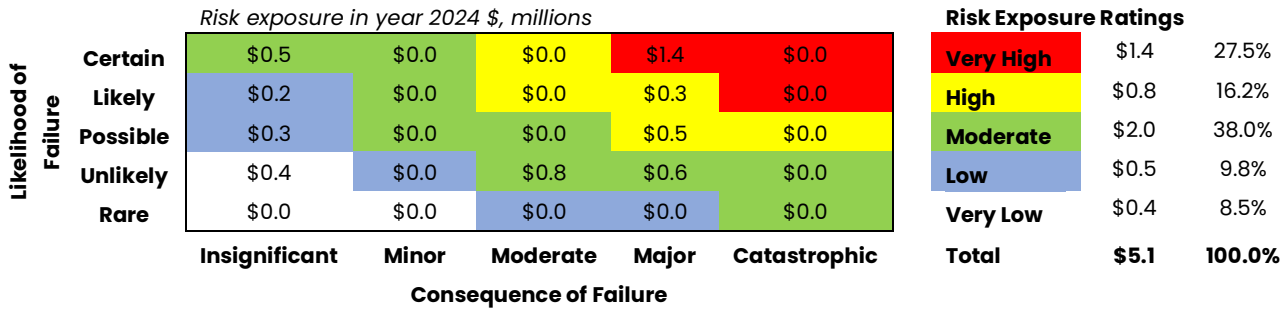


Table 13-3: Risks and Associated Mitigation Plan

Asset	Risk	Risk Rating	Risk Mitigation Plan	Residual Risk *
Wireless Access Points ($0.2M)	Poor asset condition resulting in functionality concerns	Very High	Renewal work to perform replacements of assets.	Low
Firewall ($0.2M)	Poor asset condition resulting in functionality or cyber security concerns	Very High	Renewal work to perform replacements of assets.	Low
Physical Servers ($1.0M)	Poor asset condition resulting in functionality concerns	Very High	Renewal work to perform replacements of assets.	Low

* Note the residual risk is the remaining risk after the selected mitigation plan is implemented.

In addition to the asset risks identified above, the Town is managing multiple capacity and function risks as outlined in the following table.

Table 13-4: Capacity & Function Risks and Associated Mitigation Measures

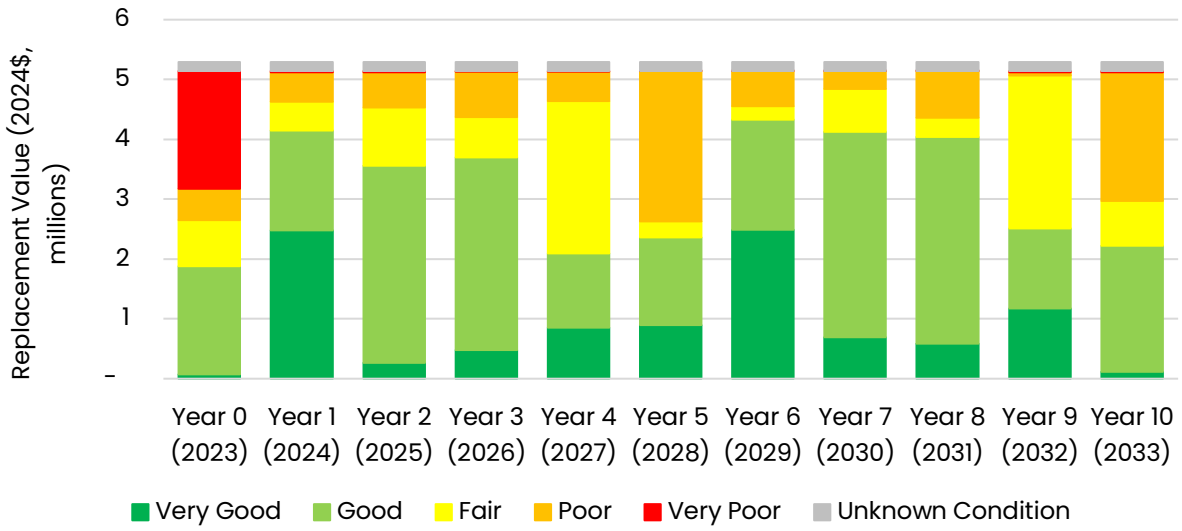
No.	Risk	Mitigation Measures
1	**Technological Obsolescence:** Rapid advancements in technology can render existing systems, such as computer hardware, software, and digital catalog systems, outdated, limiting the organization's ability to serve the community effectively.	• IT strategy identified gaps that needed to be filled. Staff are consistently being trained in new technologies and implementations. • Involved in industry conferences to see what new technology is available. • Currently reviewing the budgeting process to incorporate improved multi-year budget planning to replace of a portion of asset portfolios each year and not all in one year.
2	**Security Threats:** Cybersecurity breaches can endanger digital information/assets,	• Highly reliant on staff expertise to implement best practices. There is staff training to stay on top of best practices. • Staff participate in cybersecurity training and email campaigns throughout the year.

No.	Risk	Mitigation Measures
	including sensitive resident/user data.	• Invested into key security technologies that includes multi-layers of security. • The IT Strategy recommends specific for security improvements. • The Town participates in Red Team exercises to plan the response for security events. • The Town completes a security audit at least every other year.

13.5 Lifecycle Management Strategy

Figure 8-4 shows the condition profile for IT assets over the next 10 years based on planned budget funding. The average annual renewal budget is estimated at $1.1 million per year for the period 2024–2033, resulting in the percentage of very poor condition assets decreasing from 37% in 2024 to 0.5% in 2033. IT assets are being regularly replaced as part of ongoing lifecycle management, and based on planned funding levels, the condition of IT assets is expected to improve over the analysis period.

Figure 13-3: Planned Budget Condition Forecast – Information Technology



The average annual lifecycle cost for IT assets is estimated to be $1.0 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). If the Town's planned renewal investment of $1.1 million per year remains stable and grows in accordance with the renewal needs of the increased in the asset portfolio, the IT asset portfolio condition should be maintained.

14 Fleet Services

14.1 Overview

Fleet assets in the Town are integral to the delivery of services across multiple departments, including Community Services, Public Works, By-Law, and Planning and Development. Public Works coordinates its fleet with across Transportation and Environmental Services to support efficient operations. The Town is committed to effective and sustainable fleet management through efficient operations, lifecycle planning, and regulatory compliance to maintain reliable service delivery across multiple departments. Additionally, efforts are being made to explore the transition to low-emission and electric vehicles, aligning with broader sustainability and climate action goals.

14.2 State of Infrastructure

Fleet assets in the Town of Stouffville include light duty vehicles, dump trucks, tractor/loaders, and utility vehicles, with a total inventory valued at $11.4 million.

The condition, age, and remaining service life of these assets—weighted by replacement value—are summarized in Table 14-1. Effective asset management ensures these fleet assets remain operational and continue to meet service level expectations. Assets that have exceeded their expected service life and are classified as being in "very poor condition" may require maintenance, rehabilitation, or replacement to maintain operational reliability. Ongoing investment in preventive maintenance, lifecycle planning, and fleet upgrades is crucial to extending asset longevity, optimizing costs, and supporting the Town's long-term service delivery needs.

Table 14.1: Inventory and Age Summary, Fleet Services

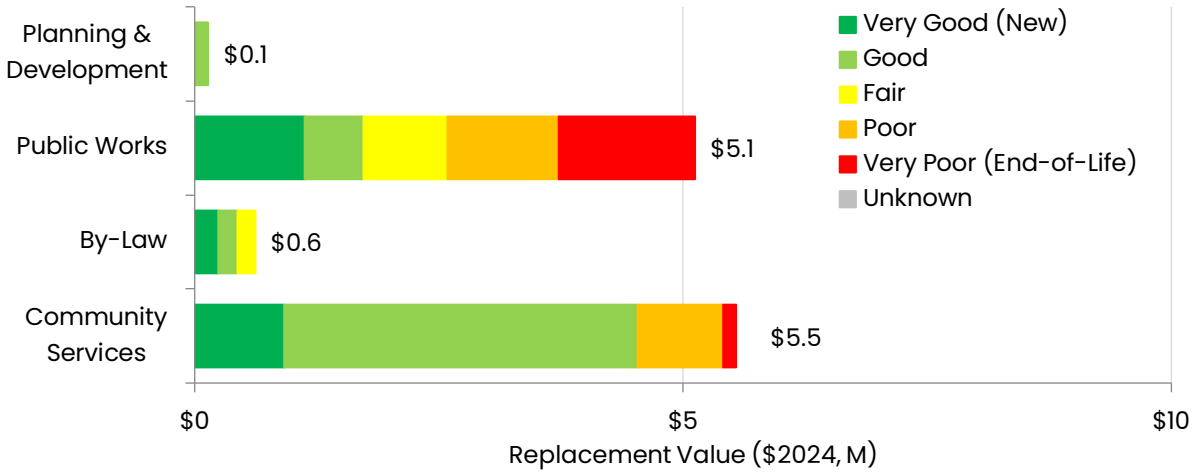
Asset Category	Replacement Value (2024$M)	Average Age	Average Service Life
Community	$5.5	7	10
By-Law	$0.6	5	8
Public Works	$5.1	8	12
Planning & Development	$0.1	5	8
Sub-Total	**$11.4M**		

Figure 14-1 illustrates the condition distribution of the Town's fleet assets, providing a graphical representation of their relative replacement value by asset category and the proportion of assets by condition grade. Fleet assets are essential for supporting municipal operations and public works services. The condition of fleet assets was based on age and the expected service life.

Overall, 69.0% of fleet assets are in fair or better condition, while 13.3% are classified as being in very poor condition. Given the critical role fleet vehicles and equipment play in service delivery, regular maintenance, timely replacements, and strategic lifecycle planning are

essential to ensuring operational efficiency and minimizing downtime. The Town remains committed to optimizing fleet performance through proactive asset management, investment in sustainable vehicle options, and adherence to industry best practices.

Figure 14-1: Condition Distribution by Replacement Value Fleet Services



14.3 Levels of Service

Table 14-2Table 13-3 outlines the Community and Technical LOS for Stouffville's Fleet Services. These assets are vital for supporting municipal operations and delivering efficient services to the community. The Town is committed to upholding high service standards through proactive maintenance, strategic investments, and regular assessments.

Ensuring the effectiveness of Fleet services in Stouffville necessitates continuous evaluation of all vehicles and equipment. The Town prioritizes the maintenance and timely replacement of aging assets to enhance asset performance and operational efficiency. Future investments will be guided by asset condition data, technological advancements, and financial sustainability, ensuring that Fleet assets continue to meet the evolving needs of the community and support the Town's strategic objectives.

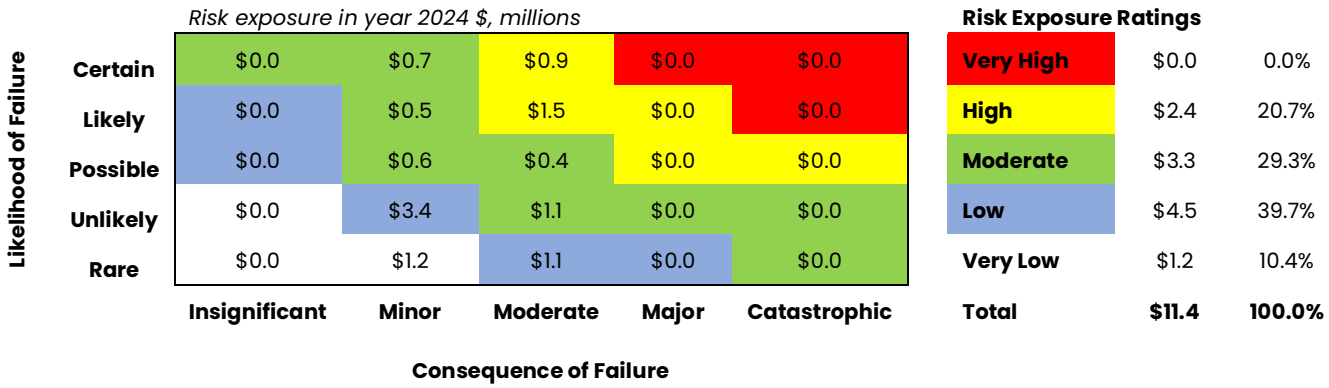
Table 14-2: Levels of Service, Fleet Services

Community Levels of Service	Technical Levels of Service		
	Description	Performance	
		Current	Proposed
Reliability (LOS)			
Fleet assets are safe to use.	% assets within their expected service life	86.7%	Maintain

14.4 Risk Management Strategy

The risk map shown in Figure 14-2 combines Criticality (CoF) ratings with Condition (PoF) ratings for Fleet assets. No assets are shown as a Very High-risk exposure (red), meaning there is no very high-risk exposure to the Town for these assets based on current condition and criticality.

Figure 14-2 Risk Exposure of the Town's Fleet Assets



The Town is managing one capacity and function risk as outlined in the following table.

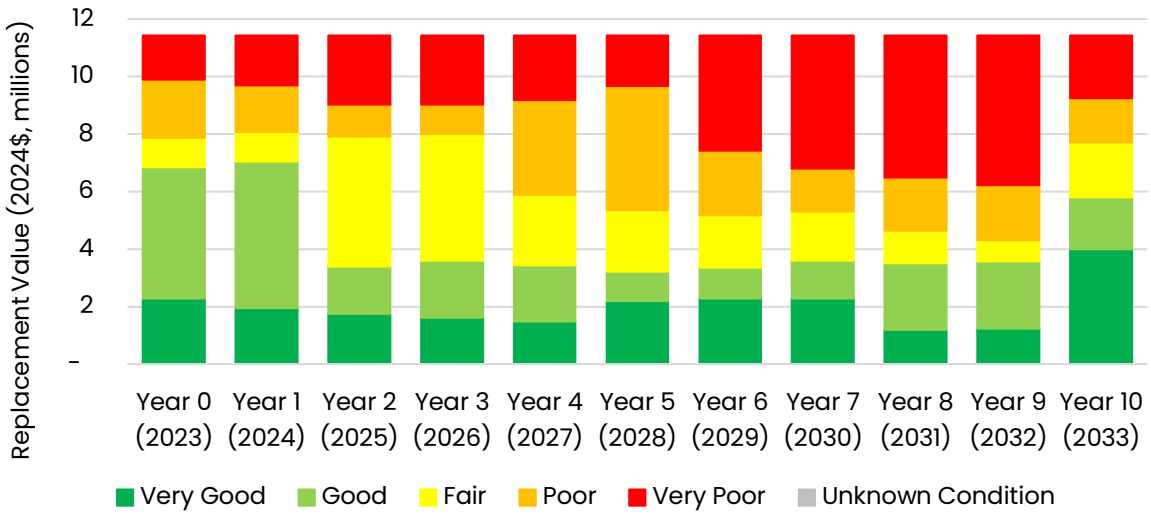
Table 14-2. Capacity & Function Risks and Associated Mitigation Measures

No.	Risk	Mitigation Measures
1	**Electric Vehicle (EV) Infrastructure**: Inadequate charging stations, outdated grids, or technology failures can hinder EV fleet deployment.	• The Town is still reviewing its practices for EV conversion of the fleet. This consideration will be included as part of that ongoing review.

14.5 Lifecycle Management Strategy

Figure 8-4 shows the condition profile for Fleet Service assets over the next 10 years based on planned budget funding. The average annual renewal budget is estimated at $0.8 million per year for the period 2024-2033 resulting in the percentage of very poor condition assets increasing from 13% in 2024 to 19% in 2033. To maintain the overall asset condition, the Town would need to spend $0.9 million per year for asset renewal. Based on planned funding levels, Fleet Service assets are expected to deteriorate over the analysis period.

Figure 14-3: Planned Budget Condition Forecast – Fleet Services



The average annual lifecycle cost for Fleet Service assets is estimated to be $1.1 million per year. This value is determined by taking the sum of the replacement value of each asset in the portfolio divided by its estimated service life. The purpose of this value is to evaluate if there is potential renewal investment needed outside of the analysis period (2034 onward). The Town's planned renewal investment of $0.8 million per year in the renewal of Fleet assets from 2024-2033 will be insufficient to address the renewal needs in the years beyond the analysis period.

15 Conclusion

This 2025 AM Plan reaffirms the Town's commitment to delivering high-quality, reliable, and sustainable municipal services through strategic infrastructure management. By aligning with Ontario Regulation 588/17 and integrating principles of lifecycle cost optimization, service level assurance, and risk mitigation, the Town has established a forward-looking framework to guide infrastructure investment decisions over the next decade.

With a total asset replacement value exceeding $1.7 billion, the Town faces both opportunities and challenges in maintaining service excellence amidst population growth, evolving community expectations, and fiscal pressures. The AM Plan identifies a projected annual investment gap of $14.6 million, underscoring the importance of long-term financial strategies, continuous data improvement, and prioritization of critical assets. In particular, the Town must address renewal needs of aging infrastructure, prepare for increased operations and maintenance demands, and ensure that growth-related assets are planned, funded, and sustained responsibly.

To close this gap and maintain service reliability, the Plan presents several key strategies, including leveraging dedicated levies, optimizing lifecycle interventions, pursuing external funding, and exploring non-infrastructure solutions. The Town's proactive use of condition data, performance metrics, and risk exposure assessments will continue to support evidence-based decision-making and enhance the resilience of core infrastructure systems.

This Plan is not static. It is part of an ongoing improvement journey that includes expanding condition assessments, enhancing work order management, formalizing governance structures, and increasing community engagement in setting service level expectations. Annual updates and five-year comprehensive reviews will ensure the AM Plan evolves alongside community needs, legislative requirements, and emerging best practices.

Through disciplined execution and a shared commitment across departments and Council, the Town will continue to ensure that infrastructure investments deliver value to current and future residents.

Appendix A – Consequence of Failure (CoF) Scores

Table 1: Transportation CoF Scores

Asset Category	Asset	CoF
Roads	High Class Bituminous (HCB)	4
Roads	Low Class Bituminous (LCB)	3
Roads	Gravel Surface Treated (GST)	2
Sidewalks & Walkways	Sidewalks	3
Sidewalks & Walkways	Walkways	3
Streetlights	Streetlights	4
Signs & Signals	Signal Structure & Equipment	4
Signs & Signals	Signal Control System	4
Signs & Signals	Regulatory (signs)	5
Signs & Signals	Priority (signs)	5
Signs & Signals	Warning (signs)	5
Signs & Signals	Unknown	3
Signs & Signals	Community	3
Bridges & Culverts	Bridges	5
Bridges & Culverts	Culverts	3
Equipment	Heavy Duty Equipment	3
Equipment	Heavy Duty Vehicle	3
Equipment	Light Duty Vehicle	3
Equipment	Light Duty Equipment	3
Equipment	Medium Duty Equipment	3
Equipment	Trailers	3
Discharge Points	Inlet	2
Discharge Points	Outfall w/ Headwall	2
Discharge Points	Outfall w/o Headwall	2
Oil Grit Separators	Oil Grit Separators	3
Ponds	Wet Pond	3
Ponds	Dry Pond	3

Table 2: Environmental CoF Scores

Asset Category	Asset	CoF
Water Mains	Polyvinyl Chloride	3
Water Mains	Ductile Iron	3
Water Mains	Cast Iron	3
Water Mains	Copper	3
Water Mains	High Density Polyethylene	3
Water Mains	Polyethylene	3
Water Mains	Unknown	3
Water Meters	Meters	2
Water Valves	Valve and Box	3
Water Valves	Valve Chamber	3
Water Valves	Pressure Reducing	4
Water Valves	Blow-off	3
Water Valves	Unknown	3
Hydrants	Hydrants	4
Equipment	Colorimeter	3
Equipment	Drill	3
Equipment	Locates	3
Equipment	Pick-up truck	3
Equipment	Pump	3
Equipment	Tapping Drill	3
Equipment	Trailer	3
Equipment	Valve Turner	3
Equipment	Van	3
Wastewater Mains	Bulk Water Station	3
Wastewater Mains	Polyvinyl Chloride	3
Wastewater Mains	High Density Polyethylene	3
Wastewater Mains	Concrete	3
Wastewater Mains	Vitrified Clay	3
Wastewater Mains	Asbestos Cement	3

Asset Category	Asset	CoF
Wastewater Mains	Maintenance Holes	3
Wastewater Equipment	Sewer Rodding Machine	3
Wastewater Equipment	CCTV	3
Wastewater Equipment	Lateral Camera	3
Wastewater Equipment	Trench Box	3
Wastewater Equipment	Hydraulic Wire Cutter	3
Wastewater Equipment	Disinfectant Sprayer	3
Wastewater Equipment	Shoring Unit	3
Wastewater Equipment	Locates	3

Table 3: Facilities CoF Scores

Asset Category	Facility	CoF
Fire Services	Fire District 51	5
Fire Services	Fire District 52	5
Community Services	Town Hall	5
Community Services	Ballantrae Field House	2
Community Services	Balantrae Tennis Storage	2
Community Services	Bethesda Sports Field House	2
Community Services	Coultice Park Field House	2
Community Services	Gar Lehman Park Field House	2
Community Services	55+ Club	4
Community Services	SCSC Arena	4
Community Services	Ballantrae Comm. Centre	4
Community Services	Lemonville Comm. Centre	3
Community Services	Vandorf Comm. Centre	4
Community Services	Lawnbowling Club House	2
Community Services	Leisure Centre	4
Community Services	Latcham Hall	3
Community Services	Stouffville Clippers Sports Complex	4

Asset Category	Facility	CoF
Community Services	Parks Depot	3
Community Services	Offsite Storage	2
Community Services	Whitchurch-Stouffville Museum	4
Community Services	19 on the Park	3
Community Services	Operations Centre	4
Community Services	Storage Trailer Containers (4)	2
Community Services	Salt Storage Facility	3
Community Services	Rental Trailer	2
Community Services	Operations Sand & Salt Storage	3
Community Services	Operations Centre Storage Building	2
Community Services	Fire Suppression Storage Building	3
Community Services	Public Works Admin. Facility 1,800	3

Table 4: Community Services CoF Scores

Asset Category	Asset	CoF
Equipment	Communication & Security Systems	2
Equipment	Domestic Water Distribution	2
Equipment	Fixed Furnishings	2
Equipment	Lighting & Branch Wiring	2
Equipment	Movable Furnishings	3
Equipment	Other Equipment	3
Equipment	Other Personal Safety Equipment	4
Equipment	Other Site Systems & Equipment	5
Equipment	Play Equipment	5
Equipment	Plowing Equipment	3
Equipment	Power Tools	3
Equipment	Recreation Vehicle	4
Equipment	Specialties	5
Equipment	Tractor/Loader	3

Asset Category	Asset	CoF
Equipment	Trailers	4
Playground & Pergolas	Playground Equipment	1
Playground & Pergolas	Wooden Structure	3
Playground & Pergolas	Metal Structure	1
Land Improvements	Ball Field	4
Land Improvements	Fence	4
Land Improvements	Gazebo	4
Land Improvements	Landscaping	4
Land Improvements	Other Equipment - Land Improvement	4
Land Improvements	Park	4
Land Improvements	Parking Lot	4
Land Improvements	Picnic Shelter	4
Land Improvements	Playground - Land Improvement	4
Land Improvements	Recreation	4
Land Improvements	Soccer Field	4
Land Improvements	Trail	4
Land Improvements	Unknown / Not Specified	4
Land Improvements	Water Supply Distribution	4

Table 5: Fire Services CoF Scores

Asset Category	Asset	CoF
Vehicles	Support Vehicle	2
Vehicles	Pumper	4
Vehicles	Heavy Rescue	3
Vehicles	Platform	5
Vehicles	Tanker	3
Equipment	Communication	5
Equipment	Gear	3
Equipment	Hose	3

Asset Category	Asset	CoF
Equipment	Ladder	3
Equipment	SCBA	3
Equipment	Equipment	3
Equipment	Trailer	4

Table 5: Library CoF Scores

Asset Category	Asset	CoF
Equipment	Books/Media	2
Equipment	Hardware	2
Equipment	Software	3
Equipment	Institutional Equipment	3
Equipment	Movable Furnishings - Library	2
Facilities	Facilities	2

Table 6: Information Technology CoF Scores

Asset Category	Asset	CoF
End User Devices	Desktop PCs	1
End User Devices	Desktop Phones	1
End User Devices	Mobiles Phones	1
End User Devices	Monitors	1
End User Devices	Notebook Docking Stations	1
End User Devices	Notebook PCs	1
End User Devices	Printers	2
End User Devices	Tablets	1
Networking Equip.	Firewall	4
Networking Equip.	Switch (Managed)	4
Networking Equip.	Wireless Access Point	4
Networking Equip.	Virtual Servers	4
Networking Equip.	Modem	3

Asset Category	Asset	CoF
Networking Equip.	Router	4
Networking Equip.	NAC	4
Servers/Storage	Physical Servers	4
Servers/Storage	Peripherals	1
Servers/Storage	Storage	4
Software	Software	3

Table 7: Fleet Services CoF Scores

Asset Category	Asset	CoF
Fleet	Dump Truck	3
Fleet	Ice Resurfacer	2
Fleet	Light Duty Vehicle	2
Fleet	Tractor/Loader - Fleet	3
Fleet	Trailer - Fleet	2
Fleet	Turf Topper	2
Fleet	Utility Vehicle	2